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*Caregiver Training Initiative*

**FINAL PROCESS AND  
OUTCOME EVALUATION  
REPORT**

*California Employment Development  
Department*

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# **EXECUTIVE SUMMARY**

## **A. STUDY DESCRIPTION**

### **Background**

The intent of the Caregiver Training Initiative (CTI) was to increase the number of health caregivers in the State of California. This initiative, which is part of the State's Aging with Dignity Initiative, provided \$25 million through competitive grants to twelve Regional Collaboratives statewide for an 18-21 month period from early 2001 through late 2002. The goals of the CTI project were to address urgent workforce shortages through innovative approaches for recruiting, training, and retaining caregivers in the healthcare industry and to enhance the earning potential of these workers. The primary participants in the program are Workforce Investment Act (WIA) clients and Welfare-to-Work (WtW) clients.

The Regional Collaboratives selected to participate in CTI were:

- Greater Long Beach Workforce Development
- Employers' Training Resource Department of Kern County
- North Bay Employment Connection
- Northern Rural Training and Employment Consortium (NoRTEC)
- Riverside County Local Workforce Investment Area
- Sacramento Employment and Training Agency (SETA)
- San Diego Workforce Partnership, Inc.
- Private Industry Council of San Francisco
- San Jose/Silicon Valley Workforce Investment Board
- Workforce Investment Board of Southeast Los Angeles County (SELACO)
- County of Ventura
- West Hills Community College District

### **Summary of Outcomes**

The proportion of Californians over age 65, 85, and even 95 will increase dramatically over the next two decades. There are not enough caregivers in California to respond to current and future demands from elderly and other populations, and this worker shortage can threaten patient safety and compromise quality of care. To address these issues, the State of California established the statewide Caregiver Training Initiative (CTI) in 2000 to help recruit, train and retain caregivers using twelve collaborative programs.

Our evaluation of the CTI provides significant and some unexpected findings. Despite program time constraints and other limitations, our findings indicate that the CTI program exceeded expectations. Not only did the CTI program increase the supply of CNAs, but it also trained more than a thousand advanced-level healthcare workers, such as nurses and psychiatric technicians. Participants fared well; comparing CTI participants to other WIA/WtW trainees,

and controlling for other variables, earnings for CTI participants were 61% higher than for the other trainees. As expected, there were positive healthcare outcomes. Comparing CTI participants to other WIA trainees, and controlling for other variables, CTI participants were significantly more apt (34%) to be employed in health care two quarters post-training.

Moreover, the program reached beyond the usual targets for CNA training, as indicated by the demographic diversity of the CTI trainees compared with other CNAs. Related to this is the very positive impact of the Welfare-to-Work component of the program. In spite of the fact that the WtW population was harder to recruit and to train, in the end (as measured by two quarters post-training) this group benefited the most from the CTI training. They appear to be a good investment, with employment rates higher than comparable groups.

Most of the CNAs in this program expressed a strong interest in continuing their education and moving up the healthcare career ladder. This is an indicator of program success, as well as a guidepost for future directions. Thus, it seems logical that the next step might be to offer further training to this group. Indeed, about a third of the participants in the newly funded Nurse Workforce Initiative come from the CNA ranks. An added advantage is that those with previous healthcare work experience have higher rates of continued employment.

If the healthcare workforce crisis is to be addressed adequately, then funding will have to support training in areas where there are known shortages. Training dollars should be invested carefully, focusing on those who have shown commitment. This means that training sites need to target carefully, not only to reach new pools of workers, but also to reach workers who have potential and who will stay. The CTI evaluation indicates that such an approach can benefit low-income workers and welfare-to-work participants, as well as the State as a whole.

Concomitantly, there should be funding for ongoing research to answer questions pertaining to which needs exist, whether training is meeting those needs, how effective training is, and who are appropriate targets of training. This is especially important given a recent federal report that states, “to date, most research on initiatives to address the nurse aide shortage has been largely nonevaluative” (GAO, 2001e, p. 17).

## **B. EVALUATION PLAN**

A research team from the Ralph and Goldy Lewis Center for Regional and Policy Studies at the University of California at Los Angeles, and the Center for the Health Professions at the University of California at San Francisco conducted this evaluation.

This final report describes CTI’s implementation, assesses program activity in recruiting, training and retaining caregivers, and addresses program outcomes, including the effectiveness of CTI in developing career ladders and improving work environments. The report focuses on several objectives “to determine whether CTI strategies were effective in increasing recruitment, training, and retention of caregivers.” The analysis uses qualitative data obtained from site visits to all twelve sites, attendance at collaborative meetings, interviews with CTI staff and CTI participants, telephone conversations, and questionnaires administered to those leaving the program early (N=99). Quantitative data sources included satisfaction questionnaires

administered to program participants (N=820), baseline information questionnaires from all participants (N=4,791), and program participant data from the statewide WIA administrative database (N=5,930). The research team merged the latter database with Base Wage data from the California Employment Development Department (EDD) to provide work history and job retention information. This merged data set also yielded two comparison groups of other training participants (WtW and WIA) in order to compare them with the analogous CTI training groups.

This evaluation was limited by not having enough information available, for example, about the state's LVN and RN populations, and by a lack of time to adequately analyze retention rates after training. Thus, we know much less about the program's impact on recruitment and retention of nurses, and about the longer-term impact of the CTI program. Future research should address gaps in our understanding about and approaches to strengthening the caregiver workforce in California.

## **C. PROCESS AND IMPLEMENTATION**

If innovation is defined as a new method, or something not used before, then for the most part, there were few innovations in this program overall. But if innovation is defined as a "change in the way of doing things," then there was in fact a diffusion of innovation, where approaches undertaken at each site were not new to the field, but were new to the site. In the areas of recruitment and training each collaborative tried approaches not previously used by collaborative partners.

### **Innovations**

- Of all the innovations, probably the most unique was that of the collaboration concept itself. Both expertise and resources could be shared so that there were fewer overlapping and redundant tasks, and more efficiencies of scale.
- Several sites proposed targeting unique populations, including military corpsmen, migrant worker family members, and non-English speaking home care workers. The inclusion of WtW participants, who accounted for about one-third of the CTI participants, was another quasi-innovation, although it was state-imposed, rather than site-generated.
- A number of sites developed new screening instruments and assessment techniques that were geared specifically to qualifications of health care workers.
- Distance learning and on-the-job training were mentioned in several proposals, with distance learning appealing to the more rural sites. These approaches are not innovative in the training world, but they were new to the sites. However, both were less successful and used on a much smaller scale than anticipated.
- Supportive services were available at all sites, and these ranged from the basics such as childcare, transportation and tutoring, to tuition reimbursement, books, uniforms, and lodging.
- Several sites offered training in other languages, although this caused some problems in the end, because at the CNA level upward, the qualifying examinations are offered in English only. To move up the career ladder, a command of the English language is necessary.

- Fast-track training, while not a new approach, was new to the CTI program sites, and was very well received and successful overall.
- With the development of a new collaboration comes the opportunity to coordinate services not previously coordinated. One example is educational partners working together on articulation agreements, thus making it easier for students to move among schools.
- The intensive case management afforded by additional funding was not overly innovative, but was anecdotally successful in decreasing the numbers of program dropouts.
- As a result of the CTI program, a number of facilities were upgraded to accommodate healthcare worker training programs. With new infrastructures in place, training may continue past the end of CTI funding.

## Challenges

- Timing was a key issue. With only one or two exceptions, collaborative staff were frustrated by not having enough time to adequately set up a new program with multiple, dispersed partners, contracts, required approvals, and new infrastructures. The paperwork and reporting requirements caused more frustration.
- The collaboration model ranged widely in its intensity of application. It was embraced by some sites, and virtually ignored by others, where partners functioned completely individually rather than as a part of a whole.
- There were issues with criminal records. Not all program applicants were forthcoming about prior criminal records, and the State's criminal checks were very time consuming. This meant that in some cases, clients finished training but were unable to receive their certificates or licenses.
- The focus on Welfare-to-Work participants was challenging because they faced many more barriers than other program candidates, and thus it was difficult to find appropriate trainees. There were also problems from the WtW program itself, since that program emphasizes "work first" as opposed to training.
- Potential participants, as part of the low-income Californian pool, had limited English capabilities.
- A number of long term care facilities did not encourage training for their incumbent workers, because they feared that this would result in workers being recruited away to better positions.
- Training programs were difficult to schedule, especially where they were tied to a quarter or semester school system. The problem was further complicated by many students' needs for pre-requisites.
- There was a bottleneck due to a lack of nursing instructors, who were much more difficult to locate than were students.
- Childcare and transportation remained among the most needed services, and despite both being available across all sites, provisions were not always adequate.
- Other services were available, but participants still listed personal problems, family problems, or scheduling problems that prevented program completion.
- The availability of on-the-job training was very limited, even though it was much-needed by these low-income students. Similarly, cash incentives, though well-received, were rarely used.

- Formal mentoring was hardly used, though it was included in a number of proposals. However, informal mentoring (as in intensive case management) was an important element of the CTI program.

## **Successes**

Regarding recruitment, the CTI overall exceeded the original participation goals. There were 5,816 CTI participants total, with 1,694, or 30% from the Welfare-to-Work program. The marketing and outreach strategies employed, combined no doubt with the economic downturn, were highly successful in bringing in more than the proposed number of trainees at eight of the twelve collaboratives.

At two sites--Riverside and San Jose--almost half of the CTI enrollees were WtW participants. There was a concerted effort to bring WtW participants into the program, and for the most part, the sites were successful in this aspect of recruitment. The consensus was, however, that this group was much more difficult to recruit, since they were less qualified academically than the population as a whole.

Most program successes related to training, where collaboratives tried approaches not previously used. Probably the most effective of these was fast-track training, developed with CTI funding by several collaboratives. This approach served the students well, and had the added advantage of getting much-needed caregivers into the workforce faster. Other approaches such as distance learning and on-the-job training were proposed, but were under-utilized (and thus not as successful as the fast-track approach).

Students benefited from extra supports, including intensive case management and a wide range of supportive services. This no doubt contributed to the fact that the CTI students were overwhelmingly favorable in their ratings of the training programs. Program administrators were also pleased with the additional support, and the flexibility that the funding allowed them. They were able to tailor services to the special needs of students, needs that varied among the collaboratives.

Some collaboratives worked diligently to coordinate and organize a number of local training programs. The result was that more students could be served more efficiently and with more flexibility. There was evidence that educational and employer partners in some collaboratives, rather than competing for resources and students, learned how to work together successfully.

One success was the emphasis on Licensed Vocational Nurse (LVN) and Registered Nurse (RN) training with about 15% of CTI trainees in these programs. CTI was initiated with an emphasis on lower level workers, especially those needing Certified Nurse Assistant (CNA) certification. However, a number of collaboratives realized that the need for nurses (particularly instructors) was even greater than the need for CNAs. At two sites--NoRTEC and Riverside--almost a quarter of the CTI trainees were in LVN or RN training courses. Over 800 RNs and LVNs were trained as a result of this program.

## **D. FINDINGS**

### **Who were the participants?**

One goal of this evaluation was to learn as much as possible about program enrollees. One evaluation goal was to determine whether the program reached out to a different pool of potential healthcare workers. Findings indicate that this occurred, mostly because CTI participants are more likely to be former welfare recipients. About 30% were supported by WtW funds, and half of all participants had received welfare at one time.

#### **General features of CTI trainees--**

- Most participants in CTI were female.
- There were a large number of single mothers in the program; 30% of participants were married, and a 65% had children at home. For the WtW group (about 30% of all trainees), 22% were married and 82% had children.
- About 32% had a health care related job in the past year.

#### **Compared with other CNAs in California--**

- There are more male CNAs in the non-CTI than in the CTI group (14.1% versus 10.8%).
- The CTI CNAs were more likely to use welfare, and to use it longer. Only about 18% of non-CTI CNAs received welfare during 2000-2001, compared with 56% of the CTI group.

#### **Training successes--**

- Almost 6,000 individuals were trained in a healthcare profession under the auspices of CTI.
- About 800 of these trainees were in LVN or RN programs, higher numbers than anticipated.

### **How do CTI participants fare in terms of post-training employment?**

#### **In terms of general employment, at the second quarter after program exit--**

- Comparing the CTI training groups, CNAs had the largest pre- to post-training increase in employment levels, from 48% to 74% employed.
- Comparing CTI participants to other WIA/WtW trainees, all groups improved. From pre-employment, the non-CTI WtW group showed the least improvement (only 8 compared with a 21 percentage point change for the CTI WtW group).
- Comparing CTI participants to other WIA/WtW trainees, and controlling for other variables, CTI trainees overall are significantly more apt (6%) to be employed.
- Comparing CTI-WtW participants to other WtW trainees, and controlling for other variables, CTI trainees have significantly higher (by 14%) rates of employment.
- Among all CNAs, there was little difference between CTI and non-CTI trainees.
- Among all CNAs, controlling for other variables, there was no difference between CTI and non-CTI groups for general employment levels.

In terms of healthcare employment, at the second quarter after program exit--

- Comparing CTI participants to other WIA trainees, healthcare employment is much higher for the CTI participants (43-44% versus 10-12%).
- Comparing CTI participants to other WIA trainees, and controlling for other variables, CTI participants are significantly more apt (34%) to be employed in health care.
- Among all CNAs, controlling for other variables, there was no difference between CTI and non-CTI groups for healthcare employment levels.

Variables related to retention in health care work (two quarters) among CTI participants--

- Completing the program (43% more likely than dropouts to stay in healthcare).
- Having prior employment in health services (31% more likely).
- Being a non-citizen (17% more likely).
- Being in a CNA training program (18% more likely than other training groups).

**How do CTI participants fare in terms of career ladder mobility?**

In terms of earnings, at the second quarter after program exit--

- Comparing the CTI training groups, CNA earnings increased the most, almost doubling.
- Comparing CTI participants to other WIA/WtW trainees, pre- to post-training average earnings increased the most for the CTI participants, around \$1,000 per quarter.
- Comparing CTI participants to other WIA/WtW trainees, and controlling for other variables, earnings for CTI participants were 61% higher than for the other trainees.
- There were even larger differences for the WtW CTI participants whose earnings were 210% higher than the WtW trainee comparison group.
- Among all CNAs, there was little difference between CTI and non-CTI trainees; all earnings increased substantially, but the CTI CNAs, when controlling for other variables, made 23% less than the non-CTI CNAs.

In terms of personal goals--

- Of 804 CTI participants surveyed, over 60% stated they wanted to continue on in LVN/RN training, and eight in ten wanted more training in a healthcare related profession.
- Of 410 CTI CNA participants surveyed, over half (56%) wanted to become an LVN or an RN and over three-quarters wanted further training in a healthcare career.

**How much impact regionally and statewide did CTI have?**

Focusing on CNAs only, the largest group of CTI trainees, there were 2,400 certified through CTI over two years, compared with 44,000 CNAs certified in the state during that time; overall, this increase of 7% is relatively small. More detailed analysis of CNA certificates issued statewide and over time suggests that about 4 out of every 10 CTI-trained CNAs were an

addition to the overall supply of CNAs. This suggests that CTI did positively impact the supply of CNAs, but some degree of substitution existed. This estimate is only for the impact on the short-term supply of CNAs, however, since we do not yet know if the CTI-trained CNAs will have higher retention rates.

Some training infrastructures were expanded. The number of LVN training programs increased between 2001 and 2003 from 82 to 97. We attribute at least one of these new programs directly to CTI-funded activities. While the other programs cannot be directly attributed to CTI funding, the fact that CTI funding supported more than 600 LVN students indicates that CTI may have had some impact on this increase. The number of Psychiatric Technician programs increased from 11 to 13. Both of the latter programs were initiated as part of the CTI program.

## **E. WHERE NEXT?**

### **Recommendations for training programs**

- Provide sufficient time for program development and sustainability.
- Promote Regional Collaboration, with flexibility.
- Partner with health care providers and educational providers to recruit caregiver instructors and mentors.
- Coordinate the activities of licensing boards and other state agencies to support new training program development.
- Make available program elements that decrease dropout rates, like flexible scheduling and tutoring, and soft skills training.
- Provide careful tutoring and assessment.
- Find out what works and what does not work, and fund successful programs.

### **Recommendations for increasing the pool of health care workers**

- Increase commitments crucial to training and retaining caregivers.
- Create partnerships between healthcare training providers, WIA, and Welfare-to-Work programs.
- Provide incentives for training providers to be more responsive to workers' needs.
- Facilitate communication among EDD personnel and agencies responsible for training and retaining caregivers.
- Broaden the scope of search for potential caregivers.

### **Recommendations for increasing retention in health care work**

- Encourage career ladder opportunities.
- Engage employers to provide assistance to workers.
- Support wage and benefit increases for caregivers.
- Encourage programs known to improve worker satisfaction and retention.



# **I. BACKGROUND**

## **A. HEALTH CARE WORKERS IN CALIFORNIA**

### **Who Are the Workers?**

The federal government compiles data on three categories of entry-level healthcare workers: (1) nurse aides, orderlies and attendants; (2) home health aides; and (3) personal and home care aides. These three combined categories are referred to as the paraprofessional workforce, allied healthcare workers, or direct care workers. Despite distinct definitions, there is considerable overlap among these jobs. Overall, these workers labor in a variety of settings, ranging from hospitals to nursing and group homes, to private homes. They provide health, personal care, housekeeping and home-management-related tasks for people of all ages with disabilities.

These workers, mostly women, are ethnically and racially diverse. Nationally, about 51% of nursing aides, orderlies and attendants are non-Latino white (hereafter designated as white), 35% African-American, and 10% Latino. About 90% are women. For home health aides, 60% are white, 25% African American, 10% Latino, and 79% are women (U.S. Department of Health and Human Services, 2000). Most workers are economically disadvantaged and have low levels of education. Many are coping with family responsibilities. Half of the nursing aides and a third of the home care workers have children under age 18 (Stone, 2000).

In California, about 56% of nursing aides, orderlies and attendants are white, 25% African-American, 13% Latino, and 3% are Asian/Pacific Islander. For workers in the In-Home Supportive Services program (IHSS), 39.5% are white, 14.7% Latino, 9.7% African-American, and 8.0% Asian/Pacific Islander (with 26.6% not reporting). Other labor market findings on In-Home Supportive Services (IHSS) workers, and Certified Nurse Assistants in California are in a recent report (<http://lewis.sppsr.ucla.edu/research/workingpapers/LMAFinalReport2002.pdf>). (IHSS is California's home care program serving 250,000 low-income people with disabilities). For entry-level workers--

- Over 60% of home care aides and 30% of nurse aides are part-time or temporary employees
  - Benefits are not available for part-time employees
  - About half of CNAs work in nursing homes, while one-fourth work in hospitals
- Hourly wages for nurse assistants in long-term care facilities are about 10% lower than the wages for competing occupations.

## **B. HEALTH CAREGIVER TRAINING**

Table 1 below summarizes training requirements for healthcare workers in the state. For more detailed information, see the 2002 Preliminary Report for the CTI Process Evaluation at <http://lewis.sppsr.ucla.edu/research/workingpapers/CTIProcessReport2002.pdf>.

**Table 1. Training and Licensing Requirements for Healthcare Workers in California**

Position	Training	Licensing	Qualifications
Personal and home care	No training required. Some counties offer voluntary basic caregiver training, usually 25-40 hours.	No certificate or license.	None specified, but IHSS workers must be at least 18 years old, or have a work permit. Some counties require criminal background check.
Nurse Aides/Ass	Except for nursing homes, usually no training required for nurse aide work.	No license or certificate.	None specified.
Certified Nurse Assistant	Required for nursing home employees. 150 hours total, 50 hours classroom +100 hours supervised clinical training.	Certificate only (no license). Must complete a competency exam conducted by a state department-approved vendor. Renewal every 2 years with 48 hours of in-service training.	-Must be at least 16 years old. -Health screening and TB test. -Criminal background check.
Home health aides	65 hours of theory + 55 hours of supervised clinical training, or 40 hours total if combined with CNA.	Certificate only. Renewal every 2 years with 48 hours of in-service training, or automatically with CNA renewal.	-Must be at least 16 years old. -Health screening and TB test. -Criminal background check.
Medical Assistant	In clinics/doctors' offices, or in adult/vocational schools: for 22 weeks to 1 year.	No licensing required, but CMA and RMA are national credentials, and are "desirable."	-H.S. Diploma or GED desirable.
Licensed Vocational Nurse	1,530 Total Hours: Theory - 576 Hours; Clinical - 954 Hours *Includes Pharmacology - 54 Hours Program Length: -Full-Time 12-14 Months of Training -Part-Time 18-20 Months of Training.	The CA Board of Vocational Nursing and Psychiatric Technicians (BVNPT) is responsible for examination and licensure. The Board contracts with the <u>National Council of State Boards of Nursing, Inc.</u> for the LVN exam (NCLEX). Renewal every two years.	-High school education, or equivalent. -Criminal background check.
Psychiatric Technician	1,530 Total Hours: Theory - 576 Hours; Clinical - 954 Hours Full-time 12-14 Months or part-time 18-20 months of training.	The CA Board (BVNPT) is responsible for examination and licensure of about 450 PT applicants annually. Renewal every two years.	-High school education, or equivalent. -Criminal background check.

**Table 1. Training and Licensing Requirements for Healthcare Workers in California**

Position	Training	Licensing	Qualifications
Registered nurse	Either a two-year community college program, or a four-year college program, combining RN with a BS.	License required from the State Board of Registered Nursing. Need to complete 30 hours of continuing education every two years at the time of license renewal.	-High school education, or equivalent. -Criminal background check.

Sources: California Health and Human Services Agency, Department of Health Services, Nurse Assistants, Home Health Aides, Hemodialysis Technicians: Certification Facts, 2001; California Board of Vocational Nursing and Psychiatric Technicians, at <http://www.bvnpt.ca.gov/factvn.htm>; California Employment Development Department at <http://www.calmis.cahwnet.gov/file/occguide>; and California Board of Registered Nursing at <http://www.rn.ca.gov/about/about.htm>

Most personal and home care aides in California are employed by In-Home Supportive Services (IHSS), a state-funded, county-operated entitlement program for low-income people with disabilities. About 195,000 IHSS users in California receive support to hire someone to provide personal care and domestic services. Regarding Certified Nurse Assistants (CNAs) and Home Health Aides (HHAs), there are currently about 100,000 CNAs and 786 programs to train CNAs in California. Training is widely available in community colleges, adult education programs, private vocational schools, and Regional Occupational Programs. In California, there are about 35,000 certified HHAs, most with both CNA and HHA certificates.

Medical assistants are unlicensed health professionals who do clerical work, simple lab work and clinical tasks under supervision in a medical office or clinic setting. They are trained in doctors' offices and clinics, or they can be trained in more formal settings such as adult/vocational schools or community colleges. Programs can range in time from 20 weeks to one year, or two years with an AA degree. Licenses can be obtained through national associations, but are not required by the State (although they may be required by malpractice insurance carriers).

Regarding higher levels of workers, according to the California Board of Vocational Nursing and Psychiatric Technicians, there are 96 accredited licensed vocational nursing (LVN) schools in the state, and 11 accredited psychiatric technician schools. Most of the LVN programs are in the community college system, and about a quarter are part of adult education programs. Nineteen programs are in private schools, eight are in Regional Occupational Programs, and one is hospital-based. In 1998 there were about 50,000 LVNs employed in California (U.S. Department of Health and Human Services, 2000).

Registered nurses must be licensed to practice in California by the State Board of Registered Nursing. Two types of Registered Nurse (RN) training programs are available in California: two-year community college associate degree programs and four-year bachelor's degree programs. Most community colleges give LVNs credit for their basic nursing course work and experience. Currently, there are about 250,000 licensed registered nurses in California, according to the state licensing board.

## **C. SHORTAGE ISSUES**

A recent press release from the U.S. Department of Health and Human Services states that 90% of nursing homes lack adequate staffing, and that this shortage is expected to worsen in the future (Pear, 2002). Media reports frequently reference the “health care crisis” in the United States and even globally. One part of this crisis is the shortage of entry-level workers. The extent of the problem varies, depending on who is reporting, but overall it ranges from “a serious problem” to “a very serious problem.” How did this crisis come about? Very simply, the demand for health care is rapidly growing, while the supply of workers is not keeping pace. These changes are due to a confluence of factors, some of which have emerged over the past two decades.

### **Demand for and Supply of Healthcare Workers**

According to a recent federal report, the “aging baby boomer generally will be the most significant factor increasing the demand for long-term care services over the next half century” (U.S. Department of Health and Human Services, 2003). Besides the growing elderly population, health care service delivery is changing, adding to the demand for workers. For example, care of elderly people often was the responsibility of family members; today, families are burdened with additional employment responsibilities, resulting in limitations on family capacity to provide informal care. Because of expanded Medicare and Medicaid benefits, more people are able to rely on formal as well as informal care supports. In the past couple of decades, we have seen constraints on hospital inpatient and nursing home payments and lengths of stay. Patients discharged while still in various stages of recovery now need more post-hospital care. Finally, technological developments have allowed more sophisticated treatment in outpatient settings and at home, requiring workers to be better trained.

While health services demand increases, the relative supply of workers remains too small. There is a “critical shortage of registered nurses” (U.S. General Accounting Office, 2001a; U.S. General Accounting Office, 2001c; U.S. Department of Health and Human Services, 2002), and there is a current shortage of Certified Nurse Assistants (CNAs) nationally and in California (Center for California Health Workforce Studies, 2001; California Department of Health Services, 2001). The shortage is a result of several trends, including low wages and benefits and competing occupations. Nurse aides, particularly those in nursing homes and home health care, receive lower wages and benefits than service workers and other workers generally (GAO, 2001e). Because so many competing jobs have higher salaries and lower demands (VanKleunen & Wilner, 2000), fewer current and future workers are drawn to these jobs. Younger women, who had very limited career choices in the past, now have many more choices (Carrier, et al., 2000). The labor pool has not grown because interest in nursing as a career is decreasing as the nursing labor force is aging (U.S. General Accounting Office, 2001c). Working conditions are poor too. Workers are exposed to infections, back injuries, and physical violence from residents (Gregory, 2001).

## **Turnover Issues**

Turnover is high, with rates for nurse aides ranging from 38 percent to 143 percent, and for LVNs ranging from 27 to 61 percent (Decker, Dollard & Kraditor, 2001). (The large ranges are due in part to different study samples and different formulas for calculating turnover.) High rates of turnover are problematic, leading to higher costs for recruiting and training new staff, overtime, and paying temporary staff, and quality of care problems, due to the disruption of the continuity of care, and depletion of staffing (GAO, 2001a). While we lament the high turnover rates in this industry, however, it is important to note that sometimes turnover has positive results for the worker. Younger workers especially experience higher earnings with more mobility (Lane, 1999). Thus, career ladder mobility, as well as retention, is an important outcome.

Studies have shown that factors affecting turnover rates are complex, but overall, increasing training and career ladder opportunities seems to result in lower turnover rates. A national study of young workers found that outside training increases job mobility and improves future job matches (Veum, 1995). Other studies indicate that nursing assistant training has an impact on higher wages and better working conditions (Collins, & Owen, 1996; Fitzwater & Gates, 2002; Goodridge, Johnson, & Thomson, 1997; Heinrich, 1998) and on satisfaction (Braun, Suzuki, Cusick, & Howardcarhart, 1997).

Higher satisfaction is related to higher retention (Kiyak, Namazi, & Kahana, 1997). Helmer, Olson, and Heim (1993) found that that job enrichment and career development with in-service training are important elements of improving satisfaction and indirectly retention. Others have found that career ladders (Remsburg et al., 2001) and job upgrades (Feldman, 1993) increase retention. A program that focuses on training supplemented by supportive services certainly has the potential to have a positive influence on retention.

## **Welfare-to-Work Worker Pool**

To date, studies of caregiver training for welfare recipients show mixed results. One large study showed that welfare recipients who are trained to become home care workers are those who are in less need of such a program, i.e. those who already have higher earnings and education, meaning that the training returns of increased earnings and reduced welfare were smaller (Bell & Orr, 2002). Programs moving welfare recipients to nurse assistant jobs have been criticized as leading to the continued marginalization of low-wage workers (Riemer, 1997), even though they can successfully fill certain gaps in the need for nursing assistants (Benway, Joseph, & Fischetti, 2000). Others have found that Welfare-to-Work programs in health care out-performed efforts in other industries (VNA Health Foundation, 2001). These findings are not conclusive, but they do indicate that if WtW training programs can encourage career ladder movement, then the chances for success are greater.

## **II. THE INTENT OF CTI**

### **A. CTI DESIGN AND PURPOSE**

The purpose of the Caregiver Training Initiative (CTI) was to recruit, train, and retain health caregivers in the state of California. The goals of the CTI project were to address urgent workforce issues by developing innovative approaches for recruiting, training, and retaining caregivers and healthcare employees, and also to enhance their earning potential. Twelve statewide Regional Collaboratives were awarded competitive grants for an 18 to 21 month period from early 2001 through late 2002. The primary participants in the program were Workforce Investment Act (WIA) clients and Welfare-to-Work (WtW) clients. The State's Employment Development Department, under earlier the Health and Human Services Agency and later the Labor and Workforce Development Agency, administered the \$25 million federal and state-funded program.

The twelve collaboratives included 46 of California's 58 counties. From the twelve sites, four were selected as focus sites on which the evaluation team would concentrate more fully: San Jose/Silicon Valley Workforce Investment Board, Greater Long Beach Workforce Development, Employers' Training Resource Department of Kern County, and Sacramento Employment and Training Agency. These sites were selected because they are geographically and demographically diverse and thus more representative of the State as a whole.

### **Implementation and Process Study Research Questions**

The implementation and process questions address the first objective above. The implementation part of the evaluation addresses procedural issues, or how well the program does what it is supposed to do. In other words, is the initiative being implemented as designed? The three implementation questions listed below address issues raised as the Regional Collaboratives initiated each project.

1. To what extent do the funded projects test innovative strategies versus traditional recruitment, retention, and training methods?
2. What barriers were identified to attracting and retaining qualified caregivers? Were these barriers overcome, and if so, how?
3. How well did the Regional Collaboratives contribute to addressing the problem of regional labor shortages in the healthcare industry?

Process evaluations provide information on what a program does, and what effect it is having on those in the program. The process evaluation looks at the formal activities and anticipates outcomes of a program, and also investigates informal patterns and unanticipated interactions. (Often, as there is here, there is overlap between the process and implementation parts of the evaluation.) Answers to the seven process evaluation questions below will describe what the program is and does.

1. How well did the solicitation and competitive selection process identify the best solutions to removing barriers for attracting and retaining qualified caregivers?
2. What efforts have county welfare departments made to increase interest by CalWORKs (California's version of the federal Temporary Assistance to Needy Families program) participants in the healthcare provider and caregiver industry?
3. How effective were the marketing and outreach strategies in attracting eligible participants to begin careers in the healthcare industry?
4. What recruitment methods were most successful/unsuccessful?
5. How well did the Regional Collaboratives do in developing and implementing formal and on-the-job training programs to prepare, hire, and retain qualified caregivers?
6. What assessment processes do county welfare departments and/or employers use to ensure that caregiver occupations would be an appropriate match for the participants' skills, knowledge, abilities, and values?
7. How effective were the training strategies used to prepare participants to advance in the healthcare industry?

Finally, the study focuses on nine outcomes-related questions. Outcomes in this report focus on the program's impact specifically on participants and, more generally, on caregiver labor shortages. The outcome evaluation relies on merging and analyzing quantitative data collected from the twelve sites, and from statewide administrative data. The outcome questions are:

1. What were the characteristics of the eligible participants who chose to, or chose not to, participate in the program?
2. To what extent was the program successful in directing family member caregivers into health care careers/occupations?
3. Of those who chose not to participate, what were the reasons why?
4. What training strategies were most successful/unsuccessful and under what conditions?
5. How effective was the initiative in recruiting, hiring, and retaining qualified individuals for the health care industry?
6. How receptive were employers to tax incentives such as monthly Earned Income Tax Credit (EITC) payments for assisting participants to remain in and complete the program?
7. How effective was the initiative in transitioning CalWORKs participants into caregiver occupations that offered career advancement opportunities in the health care industry?
8. How effective were efforts to develop skill up-grade training, develop financial incentives, and improve working conditions in order to improve retention?
9. How effective were tax incentives such as monthly EITC payments to efforts to retain workers?

## **B. THE TWELVE CTI COLLABORATIVES: DESCRIPTION AND COMPARISONS**

The twelve collaboratives selected to participate in CTI were:

- Greater Long Beach Workforce Development (LB)
- Employers' Training Resource Department of Kern County (KERN)
- North Bay Employment Connection (NBAY)
- Northern Rural Training and Employment Consortium (NoRTEC)
- Riverside County Local Workforce Investment Area (RIV)
- Sacramento Employment and Training Agency (SAC)
- San Diego Workforce Partnership, Inc. (SD)
- Private Industry Council of San Francisco (SF)
- San Jose/Silicon Valley Workforce Investment Board (SJ)
- Workforce Investment Board of Southeast Los Angeles County (SELACO)
- County of Ventura (VEN)
- West Hills Community College District (WH)

Tables 2 through 4 below summarize the various arrangements sites provided for marketing and recruiting, training and retention.



**Table 2. Site Arrangements for Marketing and Recruitment**

<u>Site</u>	<u>Types of Marketing Materials/Efforts</u>	<u>Marketing Innovations</u>
LONG BEACH	--outreach to locate and identify members of the target group, promotion through newspapers and fliers in various languages, presentations, informal meetings, initial group screenings, and established linkages with community-based organizations.	--a Cal State CNA program and local unions serve as bases for LVN recruitment --outreach programs from Cal State Career Center --campaign to local healthcare employers.
KERN	--job fairs, program website, referrals from LTC and acute facilities, referrals from DHS, and ongoing media advertisement.	--onsite high school recruitment --promotional materials enclosed with CalWORKs checks --direct promotion to farm workers.
NORTH BAY	--centralized four-county marketing campaign --toll-free number and website --ads in professional journals and promotions within professional associations.	--promotion of CTI to DOL project partners (several healthcare education partners); --using methods created by the DOL project to increase employers' buy-in --youth services to provide high school health career pathways.
NoRTEC	--print ads in regional and local papers; radio ads; news stories and features for regional and local papers, radio, and TV; informational posters and brochures; job forum informational sessions --detailed information at One-Stops and their websites.	--direct mail to CalWORKs recipients and other targeted groups --coverage on public affairs radio and on "Jobs: The TV Show."
RIVER-SIDE	--radio and newspaper public service announcements in Spanish and English --outreach by six community-based organizations --fliers and job fairs --referrals from providers and educational sites.	--recruiting and paying workers from dietary, laundry, and housekeeping to upgrade skills --California Career Videos in English and Spanish at electronic kiosks --using local military base to recruit medics --focus on migrant workers.

SACRA- MENTO	<ul style="list-style-type: none"> <li>--multilingual brochures, posters at key locations, public service announcements and “other electronic media campaigns”</li> <li>--employer recruitment of incumbent workers for advanced training and monthly recruitment orientations by educators and employers.</li> </ul>	<ul style="list-style-type: none"> <li>--mass mailing to 9,000 IHSS workers</li> <li>--One-Stop staff, Sacramento Valley Organizing Community (SVOC) participants, and union workers to recruit participants into training</li> <li>--strong ties with a local faith-based organization that helps identify potential trainees.</li> </ul>
SAN DIEGO	<ul style="list-style-type: none"> <li>--a health industry exhibit for job fairs, conferences and community events; color brochures in English, Spanish, and Tagalog; bench, kiosk, and bus shelter ads; radio public service announcements; PowerPoint presentations</li> <li>--master brochure to describe different training programs.</li> </ul>	<ul style="list-style-type: none"> <li>--an 800 telephone number as a single point of contact for CTI</li> <li>--working with career centers to conduct intake and refer participants into appropriate training programs</li> <li>--an online CTI component at Workforce.org.</li> </ul>
SAN FRAN- CISCO	<ul style="list-style-type: none"> <li>--program recruitment flyers and posters in several languages (English, Spanish, Russian, Chinese, Tagalog, Vietnamese)</li> <li>--public service announcements, ads and newspaper stories</li> <li>--mailing to CalWORKs group.</li> </ul>	<ul style="list-style-type: none"> <li>--local union advertising in its monthly magazine, through its website, and with fliers</li> <li>--targeting Chinese-speaking IHSS workers for classes in Chinese</li> <li>--published a joint caregiver career catalogue.</li> </ul>
SAN JOSE	<ul style="list-style-type: none"> <li>--recruitment through county social service agencies, including six county CalWORKs programs, nine WIBs, four county Public Authority IHSS Registries, six county area service worker unions, and community-based organizations</li> <li>--website to promote CTI</li> <li>--marketing materials to promote CTI to job seekers, employers, and providers.</li> </ul>	<ul style="list-style-type: none"> <li>--developing a standardized screening tool for providers throughout the system and standardized outcomes for job seekers and incumbent workers</li> <li>--conducting a community audit to assess the current status of regional continuum of care</li> <li>--developing a Caregiver Career Opportunity Continuum Ladder.</li> </ul>
SELACO	<ul style="list-style-type: none"> <li>--obtaining referrals from LTC facilities, acute facilities, and welfare caseworkers</li> <li>--distributing fliers in English, Spanish, and Vietnamese</li> <li>--announcements on “electronic kiosks” in libraries, malls, and other public settings.</li> </ul>	<ul style="list-style-type: none"> <li>--contacting WtW CNA grads to elicit interest in advanced training.</li> </ul>

VEN-TURA	--One-Stop to identify, refer, and assist in enrolling eligible WIA and WtW applicants --Adult Services Program Division to identify workers and recruit new applicants --WIB to identify employer needs and assist participants in the transition from training to non-subsidized employment.	--In-Home Supportive Services Program to refer applicants and provide clinical training.
WEST HILLS	--traditional marketing through the local welfare system and WIA One-Stops --radio ads (English, Spanish, Hmong), a 1-800-4-Health Hotline (English, Spanish, Hmong), college and adult school publications, and public service announcements --employers asked to refer applicants to CTI, serve on advisory committees, join strategic planning meetings, and visit training programs.	--highway billboards, cinema big screen ads, TV commercials --encouraging high schools to adopt a pre-allied health educational track.

Marketing and recruiting innovations for the CTI collaboratives varied widely. While some used wide-scale marketing, including television and radio announcements, most were much more focused, using, at most, local newspapers to advertise. One approach focused on the WtW audience was to include promotional materials in CalWORKs mailings. A few collaboratives relied on local unions to assist with finding suitable participants, while one site used community-based and faith-based organizations to identify potential participants. Several intended to work with local high schools, and others targeted IHSS workers. The most unique targeted groups included migrant workers, medics at local military bases, and Chinese-speaking IHSS workers.

**Table 3. Site Arrangements for Training**

<u>Site</u>	<u>Types of Training Sites</u>	<u>Training Innovations</u>
LONG BEACH	--two colleges --Cal State University at Long Beach.	--newly developed home care worker training class for new or current IHSS workers --Alzheimer's training for participating home care workers --a training component for IHSS consumers about rights and responsibilities --LVN training nights and weekends.

KERN	--two colleges --five employers.	--weekend, evening, televised classes, and onsite classes --employers donating classroom space, equipment, clinical settings and \$10,000 to supplement training costs --regular programs plus one for Geriatric Nurse Practitioners.
NORTH BAY	--five colleges --three adult/vocational schools --Red Cross --two private programs.	--usual supportive services plus job readiness, soft skills, and GED preparation -- “20/20” Psychiatric Technician Assistant programs where students earn full pay working 20 hours and attending school for 20 hours --fast-track training programs --resource commitments from educational providers who offer in-kind donations of instructor time and classroom space.
NoRTEC	--ROPs --six colleges --a consortium led by a seventh college	--distance learning component --flexible approach to transportation--fixed cars and bought tires when needed --lodging costs for those traveling far.
RIVERSIDE	--Community Access Centers --three colleges, one adult school, an ROP, California Nurses Educational Institute, the Marine base at Twentynine Palms, and Marriott International.	--LEGACY MENTORS peer volunteer program --Individualized Training Accounts --supportive services including internal staff development at training facilities --a Health Care Coordinator consultant to negotiate with the colleges and the employers --established a database/registry of beds throughout the area that are available for training.
SACRA-MENTO	--training at three colleges, one high school district adult education, and one ROP.	--pre-vocational and VESL classes --help with transportation, such as gas vouchers --payment for rent and utilities if needed.
SAN DIEGO	--two high schools (ROPs) --Community College --health careers academy --employer-based training.	--“Earn as You Learn” Program during employer-based training --a directory of resources for participants --soft skills/work readiness done by Labor Council --specialized training in dementia care by Alzheimer’s Family Centers.
SAN FRAN-CISCO	--two colleges --one high school (adult education) --one ROP.	--several agencies supplying remedial education --needs-based payment --childcare and transportation through the WIB.

SAN JOSE	--two colleges --adult education --ROPs.	--one county provided vouchers for all client needs --Individual Training Accounts --emergency rent payments.
SELACO	--one community college --one technical college.	--refer participants to opportunities offered by other public agencies, educational institutions, organized labor, and employer groups --fast-track program compressing 16 into 5 weeks.
VENTURA	--three Adult Schools --one ROP --two community colleges.	--use Alternative Work Experience program for CalWORKs participants where employers get up to 50% wage reimbursement --enhanced instruction, tutoring, basic skills, ESL and career counseling.
WEST HILLS	--two community colleges --six adult schools --one ROP --one CSU program.	--fast-track open-entry pre-allied health program, with teachers serving as mentors and career ladder advisors at adult schools --intensive case management from a designated CTI case manager --three vans to provide transportation for rural trainees --articulation coordinator to facilitate moving adult school graduates into community college programs --distance learning programs.

All collaboratives proposed many types of supportive services, with coverage varying greatly among the sites. Some sites paid for rent, lodging, emergency services, and even car repairs. All sites provided more intensive case management than would have otherwise been available. Several collaboratives proposed having weekend and evening classes. While not particularly innovative, this more flexible approach is extremely useful for attracting more students. Similarly, some mentioned fast-track training programs that enable students to enter the workforce more quickly, and one offered a 20-20 program where students continue working and earning while in training.

**Table 4. Site Arrangements for Retention**

<u>Site</u>	<u>Components of Follow Up</u>	<u>Retention Innovations</u>
LONG BEACH	--WIA and CSLB follow up --individualized assistance and professional development materials for graduates --encouraging employers to take advantage of tax credits and incentives.	--additional/continued case management, using job coaches at CSU Center for Career Studies and the City College. --a union-supported mentor --career ladder program combining counseling with advanced training for CNA, HHA, and LVN certification.
KERN	--private agency provides retention services for a year to CTI graduates --trained personnel dedicated solely to this project work with clients to promote completion, certification, job placement --job counseling to be provided to incumbent workers increasing their skills.	--program employer partners committed to hiring CTI trainees (e.g., one SNF committed to hire 10 new CNAs per year) --tax credits to employers who hire WtW recipients --\$1,000 to employers who hire and retain eligible CalWORKs recipients for at least 6 months.
NORTH BAY	--case management provided through welfare departments, One-Stop centers and with CTI funds --vocational counselor at one county.	--some employers committed to increasing wages of incumbent workers who complete skill-upgrade training. --one county with a retention unit, newsletter, follow up and workshops.
NoRTEC	--case management using WIA and WtW managers.	--moving up the career ladder, since much recruiting is through facilities when incumbents are hand-picked by the employer.
RIVERSIDE	--continuous outreach activity among all community-based organizations.	--bi-annual awards program celebrating successes of participants and high referral rates from community groups --wage increases for incumbent workers completing training.
SACRA- MENTO	--Individual Development Accounts for CalWORKs recipients --mentoring/job coaching --follow-up counseling on job retention and upgrade opportunities, 12 to 18 months.	--a Resource Referral System --continuing education --intensive case management (with financial incentives for students for completing program and for staying with an employer for 180 hours) focusing on Individual Service Plan goals.
SAN DIEGO	--Comprehensive Training Systems offering monitoring and case management --trainers track participants.	--work readiness coaching where mentors/preceptors receive small incentive stipends (planned but not allowed or used).

SAN FRANCISCO	--extensive case management program to follow clients (in one county) --others also provide case management (college, Jewish Vocational Services).	--union has mentorship training for shop stewards --support groups and direct follow-up with employers --job upgrade services.
SAN JOSE	--work with employers and employees during the first 180 days of employment --continued job development and placement services.	--an Emergency Assistance Program --Regional Mentoring/Peer Services --for IHSS workers, access to an expanded Registry including referrals and continued training opportunities --Regional Continuum of Care Conference.
SELACO	--6 to 12 (24 for some WtW) month follow up --case management, and oversight of employment planning, training, and supportive services.	--guaranteed unsubsidized entry-level jobs --BUSLINK mentoring and retention program --career ladder opportunities.
VENTURA	--One-Stop to coordinate placement, employment upgrade, and follow-up services for participants.	--encourage providers to take advantage of tax incentives for hiring --12-month post employment services contract.
WEST HILLS	--follow up reporting mandated by Perkins funding for vocational programs --WIB case management.	--technical support to assist individuals applying for positions at the new state mental hospital --huge employer support base.

The retention portion of the CTI program was probably the least emphasized and least developed. Most collaborative spokespersons described retention efforts in terms of the customary follow up work that is part of most WIA training programs. Some sites relied on training program providers to offer additional follow up support for graduates. Other retention efforts focused on increasing salaries, mostly for incumbent workers, and job upgrade/career ladder opportunities. Many focused on employer involvement (through CTI partnering) and employer incentives such as tax credits and bonus payments. The proposed mentoring arrangements for the most part did not materialize.

## C. THE EVALUATION PLAN

### **Evaluation Design**

This final report includes both process and implementation (Chapter III) and outcomes (Chapter IV) components of the evaluation. The former is based on the analysis of qualitative data obtained from site visits to all twelve sites, attendance at collaborative meetings, interviews with CTI staff and CTI participants, telephone conversations, satisfaction questionnaires administered to focus site program participants during (N=820) and after (N=158) the program, questionnaires administered to those leaving the program early (N=99), and interviews with 20 employers. The outcomes analysis uses baseline information on participants (N=4,791), and data from statewide administrative data sets.

For the outcomes analyses we merged multiple statewide administrative data sets, including those for WIA and WtW trainees, In-Home Supportive Services workers, Employment Development Department (EDD) Base Wage data, and CNA licensing and survey information (See Table 52-F, Appendix F: Summary of Surveys and Questionnaires Used in CTI Evaluation). The quantitative analysis consists of three major sections. First, we report on the demographic descriptions of the CTI program participants, presented by type of funding (WIA versus WtW), type of program (IHSS, CNA/HHA, RN/LVN), program collaborative, level of satisfaction, and program completion status. Second, we describe demographically CTI graduates compared with those in other WIA or WtW training programs, and CTI CNAs with those who received non-CTI CNA training. Finally, we compare outcomes pertaining to type of employment (health care versus other), earnings, and quarters worked for the CTI sub-groups and their respective comparison groups. Using multivariate analysis, we determine whether CTI training is a predictor of retention in health care work, and of wage increases.

For a more technical overview of the research design, see Appendix F, Research Methods.

#### ***Focus sites***

The four focus sites chosen in collaboration with state administrators were Greater Long Beach Workforce Development, Employers' Training Resource Department of Kern County, the San Jose/Silicon Valley Workforce Investment Board, and the Sacramento Employment and Training Agency. These four collaboratives were diverse in terms of location within the state, regional economics, urban versus rural, and multiple versus single-county partners. Information collected at the four focus collaboratives includes:

- Follow-up site visits after the initial visit
- Attendance at collaborative meetings by evaluation team members
- Face-to-face interviews with CTI staff and participants
- Training Satisfaction Questionnaire-I administered to program participants (by the collaborative)
- Follow-up Training Satisfaction Questionnaire-II (telephone-administered by UCLA)



## **Data Sources**

The use of multiple data sources contributed to the richness of the findings. While quantitative data collection is geared to formal and anticipated findings, qualitative data sources enable incorporation of informal and unanticipated program patterns. The sources of data specific to this process evaluation are listed below. More details on the site visit topics and methods, other data collection methods, and full questionnaires are included in the first CTI process study (Matthias, Morrison, Chapman, & Benjamin, 2002).

### ***Site visits and face-to-face interviews***

For the implementation and process components of the evaluation plan, we used face-to-face interviews conducted during site visits and focus-site follow-up visits, visits to collaborative meetings, and telephone conversations with collaborative members. In addition to the twelve site visits, we conducted 55 in-depth interviews with staff and participants at the four focus sites—San Jose, Long Beach, Kern, and Sacramento. We also conducted 20 interviews with employers of CTI program graduates.

### ***Baseline Information Forms***

For this evaluation, we used background data from 4,791 Baseline Information Forms, collected from each participant at all twelve collaborative sites. These completed forms provided descriptive information about CTI program participants and their work histories. These data were merged with data from the WIA database to provide a more complete demographic description of the CTI participants.

### ***Training Satisfaction Questionnaires***

CTI staff at the four Regional Collaborative focus sites administered Training Satisfaction-I Questionnaires to participants about three-quarters of the way through the program. This questionnaire provided information about sources of satisfaction and dissatisfaction with the program for 820 program participants. Follow-up questionnaires, Training Satisfaction-II, were telephone-administered by UCLA about six months after the first questionnaire was administered. There were 158 completed Training Satisfaction-II interviews, which included topics such as satisfaction with the program, reasons for participating, and future plans. Findings from the satisfaction surveys are in Appendix A.

### ***Early Departure Survey***

We conducted 99 Early Departure Surveys, by asking all sites to supply names and phone numbers of enrolled participants who dropped out of the CTI program. UCLA evaluators attempted to contact people leaving the program as soon as a name was received from a site. The brief telephone survey covered demographic information (age, gender, etc), previous healthcare work, reasons for leaving the program, and what the program could offer to increase retention. Findings from this survey are in Chapter IV (Program Dropouts).

### ***Survey of Employers***

Employers were selected from the four focus sites, with names and phone numbers supplied by the CTI collaborative coordinator. There were approximately 45 employers on these lists; we interviewed the first 20 who responded to our calls and agreed to set up interview appointments. There were three refusals: at one facility, the interviewees declined after seeing the required consent forms, and two others stated they did not have the time. Most of the interviews, conducted between January and March 2003, were at the site of employment, but five were telephone interviews. The questionnaire combined both open-ended and closed-ended questions, and focused on descriptions of the employer agency/hospital or home, advancement opportunities, worker training, hiring welfare recipients, tax incentives, worker compensation, and attitudes about the healthcare worker shortage. Results from this survey are in Appendix B.

### ***Post-program survey of program coordinators***

Toward the end of the CTI program, the evaluation team surveyed each site and asked key CTI staff people general questions about the program. At the All-Site meeting in Sacramento, October 2002, we distributed one-page questionnaires, one for each site, with four open-ended questions. We followed up with an email to each site, repeated several weeks later to sites not responding. Questions covered what they would change if they to repeat the program, what was unexpected about the program, why certain components of the program like distance learning, mentoring, and on-the-job training did not gain more momentum, and what they would recommend to the State. This is an important element of the evaluation, given that these respondents were on the front lines, working every day with the program and its participants. They were well aware of programmatic hitches and of areas needing improvement.

We received responses from seven of the twelve sites. Comments from the survey are interspersed throughout this report, with the survey summarized in Appendix C.

### ***Statewide administrative data***

As mentioned earlier, we analyzed and merged data from multiple statewide administrative data sets, including those for WIA and WtW trainees, In-Home Supportive Services workers, Employment Development Department (EDD) Base Wage data, and CNA licensing and survey information data. The WIA comparison group includes those who entered the WIA system during one year only, 2002, whereas the WtW comparison group and the CTI group include those who entered the WIA system any time during a two year period, 2001 and 2002.

### **Limitations**

The design of this study posed several limitations. First, this study did not use an experimental design with control and experimental groups. As a result, we cannot know for certain if people in the program are more enduring or more effective workers than those without such a program. To address this shortcoming, we used comparison groups of non-CTI WIA and WtW participants. Similarly, we drew comparison samples from the statewide CNA database, but these included only CNAs, and they were not matched samples.

Second, we do not know how many CTI participants would have gone into healthcare work anyway, without assistance from CTI. We addressed this partially, by describing non-CTI CNAs to determine in what ways they were different from the CTI CNAs. We also used multivariate analyses to establish a model for determining how much CTI actually added to the CNA workforce.

Third, there was the challenge of consistent administration of the Baseline Information Forms and Training Satisfaction Questionnaires. To minimize inconsistency, the evaluation team instructed each collaborative, both verbally and in writing, how and when to administer these questionnaires. The Training Satisfaction-II Questionnaires and Early Departure Surveys were telephone-administered by CTI staff, so consistency was not an issue.

Fourth, the most important source of qualitative information on processes and implementation was each collaborative's partners. Where partners were hesitant to share information, our ability to evaluate was more limited. There were also problems related to recall bias. When questions pertain to something that occurred several months earlier, staff or student recall can be limited or distorted. We addressed this by collecting and validating information from several respondents at each site.

Finally, we were able to follow up on program participant data for only two quarters after training. This provides only short-term findings. Ideally, we would like to follow program participants for one year and even two years past training to understand more clearly and completely the impact of the program on healthcare employment retention.

### **III. WHAT DID THE REGIONAL COLLABORATIVES ACCOMPLISH?**

#### **A. STARTUP**

As a general observation, almost every collaborative soon discovered that starting the CTI program was much harder than anticipated. There were various stumbling blocks along the way, such as bringing together, both physically and culturally, a diverse set of individuals and programs, getting approval for numerous sub-contracts that in some cases took over a year to complete, and finding schools or programs to provide the necessary training. The section that follows describes the innovations, challenges, solutions to those challenges, and successes pertaining to the startup experience. For more detailed descriptions of the CTI startup experience, see the CTI Process and Implementation Report (Matthias et al., 2002).

#### **Innovations**

##### ***Collaboration***

One major innovation of the CTI program was that it was based on a collaborative model, a model that began as each collaborative prepared its CTI proposal. Unlike other innovations that emerged during each proposal's conception, the collaboration effort was a requirement mandated by the State, and implemented by all twelve collaboratives, although to varying degrees. While collaboration is definitely a program innovation, some sites were more innovative than others. All twelve collaboratives shared the general goals of recruiting, training, and retaining healthcare workers, but unique features within each CTI collaborative resulted in twelve different approaches to collaboration. Each collaborative established its own parameters for collaborative partner relationships. Most notable differences were in pre-CTI relationships, geography, and administration.

Some counties and agencies had pre-existing working relationships, while others had never partnered before and had to learn about other agency or educational programs at the same time they were fostering new relationships, assembling a grant application, and then starting a new program. Previous relationships, where they existed, facilitated proposal collaboration and reduced unexpected challenges during the start-up phase.

The collaboratives varied by composition. Three collaboratives were single-county based, and nine collaborative partnerships included from two to sixteen counties. There were ethnic, economic, and population size and density variations. Eleven collaboratives were administered through Workforce Investment Boards (Workforce Investment Boards, or WIBs, administer WIA-related activities), but one collaborative was administered by a community college district.

Each collaboration style was unique. At one extreme, one collaborative divided the grant dollars and enrollment goals based on county population among the participating counties, and

counties worked independently of each other. At the other extreme, one collaborative had strong relationships with its new partners and sub-committees that communicated regularly to share information. The remaining collaboratives fell between these two extremes. Usually, the largest fiscal agent/WIB took the lead in creating infrastructure and developing marketing materials, but had limited or no involvement in the partner operations.

### ***Innovations perceived by sites***

When we asked sites about their startup innovations, responses usually pertained to collaboration. Most collaborative staff mentioned the positive outcomes of the collaborative approach. They talked about the value of partnerships and leveraging dollars, because “a combination of partners is needed to take care of all the barriers and all the needs.” They mentioned that the partnership can be sustainable, and that it can contribute to shared experiences and resources, curriculum development, better communication, cross-referrals, and new relationships. They mentioned relationships with employers that were great and sustainable, relationships that “never happened before,” and new partnerships between colleges and agencies that “resulted in being re-energized and more positive.” Some sites collaborated “with more partners than ever before.” One collaborative’s coordinator mentioned that by bringing together all of the community training programs, their ability to serve low-income people was broadened. Another stated, “This [collaboration] sparked an interest in being bigger and better...more buildings and instructors. It is not a regional collaborative, but a regional strategy. It makes us get out of our insular communities.”

A couple of collaborative spokespersons, however, stated that innovations were non-existent, and one site evaded the question by responding, “the program gives us the opportunity to innovate. They [the State] are promoting and even demanding that we innovate.” Another coordinator stated at the onset that “everyone has been an island, so it is hard to know.” This collaborative later pulled the partners together and eventually functioned as a true collaborative.

### **Challenges and barriers**

#### ***Time Frame***

The short time span between grant announcement and program start date, and the short time frame for the program, were major challenges to the grantees. This theme recurred at most of the site visits and during interviews with staff. Based on the post-program survey of CTI coordinators, many felt rushed while setting up the CTI program, stating that the program was too brief. Having more lead time that would allow better planning, they said, would have contributed to more program success. On a related note, many complained that the paperwork was burdensome and overwhelming. This was partially due to having two funding sources that over-burdened the subcontractors. One stated that the required paperwork, combined with the demands of the evaluation team, “was overwhelming for our staff, students and training providers.”

- Confusion about the program, especially eligibility and reporting requirements. The short time between award announcement and program start date (under six weeks) required collaborative staff familiar with only one program (WIA or WtW) to learn about the other program. Many local CTI administrators were confused about eligibility,

reporting, and performance measures for CTI. These issues were eventually resolved, but in some cases resolution took many months.

- Sub-contract negotiation and approval. Some collaboratives required numerous sub-contracts, for each county partner as well as for each agency partner. Many sites had unanticipated problems with sub-contracts that took a very long time to draft, negotiate, and finalize, especially when city or county board approval was needed. At some sites, this process took as long as a year.
- Program Licensure. In some collaboratives, educational providers needed to receive approval from state licensing boards to add or change instructional programs, an occasionally lengthy process. At one collaborative, the application for adding a Psychiatric Technician curriculum was quickly approved, but this seemed to be the exception and not the rule. At other collaboratives that same approval took many months, a frustrating delay for the program administrators.
- Concerns over creating an infrastructure of courses, instructors and case managers for a short-lived grant. The CTI grant allowed for personnel expenditures, but many CTI partner agencies and organizations could not easily hire staff for only eighteen months. Further, while community colleges and adult schools could use grant monies to expand capacity and invest in equipment, they hesitated to make that investment.

### ***Uneven adherence to collaboration model***

Not all collaboratives benefited equally from partnerships and partner investments within collaboratives were uneven. The key barriers to active and innovative partnering were:

- Organizational barriers. In most cases, grantee collaboratives were new partnerships. Few counties had prior WtW and WIA collaboration experience. Many counties had not collaborated before with other CTI partners for good reasons - their populations, industries, provider communities, and workforce needs differed. Where major partners, such as neighboring counties, had collaborated before, grant start-up was easier.
- Significantly different enrollment goals among collaborative partners. Because CTI enrollment targets varied significantly by county and within each collaborative, there was wide variation in the investment made in the CTI by the partners in the collaborative. A county with a goal of only eight participants did not have to revamp recruiting or training as much as a county with a goal of several hundred.
- Small percentage of total budget provided by CTI for partnering agencies. By the time the CTI dollars were split among many counties and/or agencies, some considered their share to be too small to do anything except meet minimum enrollment goals.

### ***Issues with criminal records***

Identifying and expunging previous criminal records for clients so they could qualify for certification was a significant challenge. California Health and Safety Code Section 1337 requires that certified nurse assistants obtain criminal record clearance upon certification and then biannually. Each applicant must submit to a fingerprint test that is processed by the California Department of Justice. Individuals with convictions may apply to have these convictions sealed and destroyed, reduce felonies to misdemeanors, or receive a letter of pardon from the Governor. Any of these avenues can lead to expungement, or deletion of records that could otherwise prevent certification or licensure in the healthcare field. One WIB had monthly seminars available for CTI applicants on record expungement, run by a retired judge, and other sites also offered some expungement assistance, but usage levels varied widely. The criminal records system presented significant challenges to the CTI program, including:

- Timeliness of receiving fingerprint results. Collaboratives reported delays in getting results of fingerprinting back from the State, where students must be cleared through the Department of Justice and the Health and Human Services Agency.
- Misperceptions by CTI participants on the thoroughness of the identification process. Both instructors and students reported that some CNA students falsely reported no criminal background on application forms. This meant that some received training but not certificates.
- Complexity of the expungement process. CTI staff members reported that many potential candidates had criminal records, but may have been able to expunge, or erase, their records to qualify for healthcare employment. The expungement process, however, can be both costly and lengthy.
- Limitations of background checks. Only crimes prosecuted in California are subject to review, so out-of-state criminal records will not be identified in California's background check system. A lengthier and more expensive review process would involve submitting fingerprints to the FBI, but this is not required by state regulations and is not done.

### **Lessons and successes**

#### ***Startup solutions recommended by project coordinators and staff***

Comments below were in response to our question to the site coordinators about what recommendations they would like to make to the State, if the project were repeated.

*Time constraints.* Although a project such as this rarely would have the option to proceed at a more leisurely pace, such an approach would be widely embraced. Many of the CTI coordinators mentioned not having enough time to get started, or to meet the program requirements, causing them no small amount of frustration. While most understood the reasons for the short time frame, in an ideal world, they would like to have had more time, and less stress. Some of the CTI coordinators suggested that the State needed to "be realistic in ... expectations for reporting, and don't forget the lag time involved with JTA," and "don't rush a project. When it is ready, then start. Work the bugs out first."

*Administration.* Many of the CTI coordinators' recommendations reflected their frustrations administering a neophyte program that was trying to adapt and accommodate as problems and questions arose. They suggested that the State "have a well thought out plan and procedure for accomplishing the plan from the start," that the "rules set forth apply to everyone," and that the Regional Advisors are trained so that "everyone is giving the same answer." Some specific problem areas pertained to participant eligibility, acceptable training programs, and working with the JTA system. One felt that "it took a long time for the State to formally agree that the WIA income guidelines were waived under CTI. Another stated that "the limitations ...on the types of health careers... changed after the proposals were already submitted" which limited areas of recruiting. And another felt that the JTA system--the management information system used for all WIA enrollees--was not able to provide the information needed due to its slow turnaround time. They had to develop a separate tracking system, but this was not apparent at the start of the project.

*Criminal records issues.* Throughout the grant period, sites reported difficulties with CTI participants who did not disclose past criminal records, resulting in the site paying to train a participant who would not be able to attain certification. CTI coordinators recommended that criminal clearance be secured before participants begin training, but that decision often was not theirs to make. Educational providers offering CNA training have established procedures and timing for criminal record clearance. Some schools will not accept students until they complete criminal record clearance, but the time lag in securing clearance means a potential participant would need to wait up to six months before enrolling in a training program, not a feasible alternative for an 18 month project. Other schools wait to begin criminal clearance until it is clear that the student is likely to pass the training course and state exam. One feasible solution is to reduce turnaround time for criminal records clearance. We understand the California Department of Health Services Licensing and Certification Division has recently addressed this issue.

*Regular meetings important.* After the fact, one site's coordinator realized the importance of regular, continuing meetings with the CTI collaborators. This is obviously an important component of effective collaborative functioning.

*Planning meetings at the local level occurred regularly in the beginning and then tapered off once the program began. Hindsight suggests that these meetings should have continued throughout the program to ensure that communication channels remained open, and ultimately increase the success of the grant.*

*Supportive services important.* Another coordinator stressed the importance of budgeting enough money for supportive services. They realized too late that the employers were less in need of incentives than the students were in need of supportive services for program completion and job retention, and they admitted that with hindsight, they would allocate more funding for the students, and reduce incentives to employers.



### *One collaboration--case study of a successful turnaround*

One collaborative, San Jose/Silicon Valley (SJSV), was able eventually to share responsibility, authority and accountability for achieving results, in a true collaborative effort. Here, three urban counties —Alameda, Contra Costa, and Santa Clara— partnered with three rural counties —Monterey, San Benito, and Santa Cruz. Representatives from these counties began meeting and communicating soon after the State released the Solicitation for Proposals. Members shared their different areas of expertise and their concerns about the healthcare workforce.

At the onset, there were major implementation problems. First, it was difficult for the large-county leaders to determine whether they should act or wait for a group decision on the action. Second, the large number of collaborative organizations each had complex contract procedures requiring lengthy contract approvals. Third, with six counties sharing the grant, each county's share was small compared with non-CTI training program dollars, giving the CTI grant low priority. Finally, the designated grant coordinator was not involved in the proposal process, so had to learn about CTI quickly while trying to give direction to a large group of strong, experienced partners.

Several months into the grant period, CTI enrollments were so low in the SJSV collaborative that representatives from EDD met with SJSV WIB leaders to voice concern. The WIB leaders responded quickly, hired a new project coordinator, and effectively “turned the grant around.” The initial high level of interaction among partners was revived due in large part to the efforts of a workforce consultant engaged as the project coordinator to insure that the collaborative met its stated proposal goals. The revived partners worked effectively to create infrastructures for working together on future projects, and for investing in long-term strategies to address healthcare workforce issues.

## **B. MARKETING AND RECRUITMENT**

### **Innovations**

We asked about recruiting and marketing innovations at the initial site visits. Responses indicated that the collaboratives used a broad range of marketing and recruiting techniques, but there were few new innovations.

#### ***Marketing evident but not innovative***

A few sites used “800” numbers effectively as part of their recruitment campaigns. Many of the sites hired marketing teams and some sites used in-house WIB marketers. One site mentioned “the opportunity to apply a marketing concept to a new program...Also the ability to tie training to labor market information to highlight health care as a career opportunity.” In the end, most agreed that finding program participants was not that difficult, though many agreed that finding qualified applicants was more challenging. Thus, screening was an important element of the program.

### ***Non-traditional participants targeted***

At the initial site interviews, one site mentioned as an innovation that they intended to provide training to military corpsmen nearing discharge so they could challenge the LVN exam. The same site was also interested in bringing farm workers into the CTI program. Another site conducted outreach to farm workers to provide information on the wide range of opportunities for jobs other than agriculture. Other non-traditional populations targeted by the CTI collaboratives included non-English speaking home care workers for skill upgrades, potential upgrade candidates identified from CNA/WtW databases, migrant worker family members, and foster youth nearing emancipation.

### ***New screening instruments developed***

One site mentioned as an innovation its CTI Suitability Packet, a screening device that was highly praised by those affiliated with the program. Health care programs, more than most other training programs, require specialized qualifications and skills. Similarly, two other sites mentioned special assessment techniques, one of which was a pre-screening checklist. More than one site had several steps in the assessment/screening procedures.

## **Challenges and barriers**

### ***WtW participants more challenging***

Several CTI coordinators mentioned problems both in recruiting Welfare-to-Work participants, and in training them. Several were surprised at how difficult it was to recruit from this group, and one mentioned a “lack of work maturity skills, and inability to complete even a short six week training program by more than half of the welfare clients that were enrolled.”

The WtW participants faced more barriers than do members of the general population in seeking healthcare training. Key barriers were:

- Lack of English proficiency
- Lack of basic math and science knowledge
- Lack of “soft skills”- professional dress and attitude, timeliness
- Transportation problems
- Childcare problems
- Criminal records
- Substance dependency
- Domestic violence

### ***Emphasis on “work first” limits the flow of potential CTI applicants***

CalWORKs caseworker commitment to “work first” diminishes the importance of training and presents obstacles in making referrals to training programs. Caseworkers are keenly aware of the time limitations for every WtW client. If training is not available immediately at a location easily accessible to the WtW client and if the client has any other barriers to overcome, such as those listed above, caseworkers in most California counties are likely to require the client to seek work instead of training.

### ***Limited English proficiency a significant barrier***

A large and growing number of low-income Californians do not speak or read English well enough to complete English-only training courses or certification exams. Lack of English proficiency means that many potential participants need more preparation/assistance to qualify for certified caregiver training. We identified only one bi-lingual training program for CNAs and HHAs in the State, a private school in San Francisco.

### ***LTC facilities not always supportive of worker training***

Some LTC facilities fear losing valuable workers, even if only in the short-term. Thus, they are not always eager to encourage workers to receive more training. In an industry faced with worker shortages, short-term self-interest by employers may be at the expense of longer-term improvements for workers, society, and the employers themselves. Retaining current workers, however limited their formal training, supercedes encouraging career path choices that may lead workers to leave for better jobs. Employers are both crucial and challenging partners.

### **Lessons and successes**

#### ***Collaboratives exceeded total participation goal***

Though some collaboratives started up slowly, most reached or exceeded their anticipated numbers of participants, so recruitment efforts were more than adequate. Several CTI coordinators commented positively about the quantity and quality of the participants overall:

*...the commitment of the customers. A lot were employed (i.e., under-employed) and still display a lot of commitment to the program.*

*It was a pleasant surprise that through shared resources, creativity, and hard work, we were able to exceed our goal of participants served by over 50%.*

*The success our region had in recruiting applicants for the program. We were able to exceed our planned enrollment goals by approximately 25%.*

Table 5 summarizes enrollments by site, and also shows the proportion of enrollees who were Welfare-to-Work participants. Training goals are based on the performance goals established by each collaborative in its proposal submitted to the State. The proportion of WtW participants was determined in part by the State's request for budgets "reflecting a 60% WIA to 40% WtW Grant Program funding ratio."

**Table 5. Total Number of CTI Participants, by Site**

<u>Training Site</u>	<u>Training Goal*</u>	<u>Actual**</u>	<u>% WtW</u>
Kern	500	579	19.0%
Long Beach	1210	524	13.5%
NORTEC	350	875	31.7%
North Bay	200	279	37.3%
Riverside	300	376	47.3%
SELACO	300	337	41.5%
SETA	530	530	26.4%
San Diego	494	403	39.5%
San Francisco	200	349	15.2%
San Jose	300	435	49.7%
Ventura	150	88	22.7%
West Hills	1135	1041	28.1%
<b>TOTAL</b>	<b>5669</b>	<b>5816</b>	<b>29.0%</b>

\* Based on the original collaborative proposal submitted to EDD.

\*\* Based on WIA enrollment data, EDD, 2001-2002.

The total number of CTI trainees was higher than the total proposed. While most sites were at or well above their original goals, as stated in their proposals, four of the sites had fewer participants than intended. The largest difference between the goal and actual numbers is for Long Beach, where most of the targeted trainees were IHSS workers. Those workers, however, did not materialize. With hindsight, the program planners there realized that IHSS workers did not value training that did not increase salaries or move them up the career ladder, and most were too busy to attend.

About 30% of the CTI participants were enrolled in Welfare-to-Work. Overall, San Jose and Riverside had the highest proportions of WtW (compared to WIA) participants, almost half. Long Beach and San Francisco had the lowest proportions, only about one in six participants.

***Several innovations for reaching target groups in the community***

- Reaching out to community-based organizations to assist in marketing and identification of potential candidates.
- Partnering with healthcare unions.
- Building relationships with healthcare providers/employers.
- Fostering interest in caregiving careers among high school students.
- Leveraging exposure by promoting community interest stories for local television and radio programs.
- Incorporating both existing and emerging technology into marketing programs, such as toll-free hotlines, websites and pages, and electronic kiosk ads.
- Collaboratives sharing marketing materials with each other.

### *Participants heard about the program from many different sources*

We asked in the Baseline Information Forms how program participants heard about the CTI program. Table 6 shows responses, by site, with bolded figures for the site with the highest proportion in any response category. Variations in responses largely reflect each site's approach to marketing. For instance, Kern's in-house marketing team produced a video that was aired on local TV stations, and this approach reached almost one of twelve participants. Kern also had the highest proportion indicating newspaper ads, and in this rural area, the ads were tailored to the specific local paper where the training was occurring. NoRTEC sent mailings to CalWORKs recipients that may explain the high response to "newsletter/mailling" there. SETA hired an efficient marketing team, and at that site more people were marketed by brochures, job fairs, and someone else than at the other sites. It should be noted that "someone else" could be the indirect result of active marketing. SELACO recruited more than half of the respondents through a county worker; at this site there was a strong affiliation with the WtW case management team. Long Beach with its focus on IHSS workers had strong ties to its local union, and here one in six participants heard about the program through the union, a much higher proportion than any of the other sites.

**Table 6. How CTI Participants Heard about the Program, by Site**

	Kern County	Long Beach	NOR- TEC	North Bay	River- side	SELA- CO	SETA	San Diego	SF	San Jose	Ventura	West Hills
<u>How Heard About Program (%):</u>												
Newspaper ads	<b>15.1%</b>	5.9%	9.5%	3.9%	4.9%	0.8%	9.9%	11.7%	2.7%	4.2%	0.0%	5.2%
Bulletin												
boards/posters	2.4%	1.8%	4.6%	0.5%	3.2%	0.0%	4.7%	0.4%	1.4%	2.6%	0.0%	<b>4.8%</b>
Newsletter/mailling	2.2%	4.1%	<b>16.2%</b>	1.0%	0.0%	0.4%	2.6%	2.3%	3.7%	0.6%	1.3%	6.9%
County worker	12.1%	7.3%	6.6%	14.0%	35.4%	<b>53.3%</b>	12.0%	5.3%	10.2%	20.8%	20.0%	3.9%
Someone else	33.2%	19.2%	22.4%	17.4%	23.0%	4.6%	<b>37.0%</b>	28.8%	28.5%	28.5%	10.7%	35.4%
TV/radio	<b>7.9%</b>	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	1.2%
Brochures	2.2%	1.4%	6.2%	0.0%	1.4%	1.2%	<b>9.1%</b>	3.8%	6.8%	3.5%	4.0%	8.4%
Job fair	0.2%	0.5%	1.2%	0.5%	0.5%	0.4%	<b>1.8%</b>	0.4%	1.7%	0.6%	0.0%	0.7%
Web-site	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	1.0%	0.0%	0.1%
School	5.0%	1.4%	1.2%	0.0%	0.0%	0.0%	0.8%	0.4%	<b>9.8%</b>	2.2%	9.3%	2.1%
Career Center	0.4%	<b>16.9%</b>	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.7%	0.6%	0.0%	0.5%
Employer/At Work	0.2%	2.7%	0.0%	0.0%	0.3%	0.0%	0.0%	0.8%	0.3%	0.6%	0.0%	0.2%
Union	0.0%	<b>15.1%</b>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%
Other	18.9%	23.3%	29.5%	62.8%	31.4%	39.5%	21.1%	45.8%	33.9%	34.3%	54.7%	30.6%
Total N=4,133												

Source: CTI Baseline Information Form, 2001-2002.

### *Some non-traditional populations included in training*

In the end, most of the sites found that incorporating non-traditional populations was more difficult than they realized. For the medical corpsmen, the events of September 11 meant that all plans based on military duty were disrupted. For the non-English speaking population, some sites commented on the difficulty and length of time needed to bring these people to the level that would allow them to, for example, take the CNA exam that is offered only in English.

### ***Innovative assessment procedures geared to health care***

Not everyone is suitable for healthcare work. Some collaboratives developed innovative and comprehensive assessment procedures to assess suitability for healthcare work. While all collaboratives are familiar with suitability assessment tools and with the WIA and WtW populations, they are not as familiar with the difficulties of assessment in the healthcare field. Requirements are challenging. Caregivers must be proficient in English, have no previous criminal convictions, submit to drug testing, and be able to manage both physical and emotional work challenges, as well as the child care and transportation issues of work shifts that rotate around a 24 hour per day schedule. One collaborative developed an assessment process to determine applicant fit with the physical and emotional demands of caregiving. Partners in some other collaboratives use more informal and personal screening approaches.

## **C. TRAINING**

Detailed information about the training programs by site, specifically about the training settings and the supportive services offered, are described in more depth in the first CTI process report (Matthias, Morrison, Chapman, & Benjamin, 2002). The next section on training provides general descriptions of innovations implemented by the sites, challenges and barriers to training, and program successes.

### **Innovations**

Although the approaches described in this report are not new to the educational realm, they are approaches generally not used by WIB partners prior to the CTI program. Thus, there was some diffusion of innovation. Initial site visits where we asked collaborative partners about proposed innovations, and later observations and interviews led to the categories of innovations listed below.

#### ***Distance learning***

Four rural collaboratives included distance learning components in their proposals, focusing on entry-level through RN positions. At one collaborative, the administrators stated that CTI gave them “an opportunity to get involved in things like distance education, which we otherwise wouldn’t have done.” Here, a community college developed non-clinical programs on-line, such as gerontology and pharmacology for the RN degree. Another collaborative wanted to share resources across and within the adult schools and community colleges to implement distance learning. The partnership meant that students at one college could take certain programs, like radiology technician or RN, at their own campus even though the host program was at a distant college. CTI students had priority registration into those highly impacted programs. The logic was to keep locals in their own community and provide rural health professionals for local hospitals. For example, the local college expanded its existing RN program to start new 10-student additional cohorts in three small rural sites. The rural sites paid for the clinical component instructor, and the classroom academics were distance-broadcasted.

The reasons distance learning was not used elsewhere (based on the CTI coordinator survey, Appendix C) centered on program costs, in terms of time and money. There were complications like “issues of logistics, infrastructure and partnering that are not easily nor quickly resolved,” and “curriculum management, access to services, and a basic understanding of operations.” Then, too, was the issue of clinical work that still had to be provided in an approved facility. One coordinator stated that it was not conducive for their populations of disadvantaged participants who “have difficulties with technology, have time constraints and have more appreciation for teachers and a classroom setting.” Another coordinator said:

*...in nursing with the direct patient care component you need to be with your fellow students and instructors. [Also], you are working as a team and in order to develop that component you have to have your students together.*

Thus, distance learning seemed to be only a partial solution for isolated areas.

### ***On-the-Job training***

On-the-job training (OJT) is beneficial to students who need income while they are in training, and who are not able to give up a full-time salary. Because many of those targeted for CTI training are primary family wage earners, increasing the numbers of those paid during training should be strongly considered for future initiatives. Some of the collaboratives used on-the-job training, enabling students to earn money while attending classes. Classroom training was provided at the same facility as the clinical training, and students were paid for full-time work while in training. Half of the collaboratives offered OJT programs, but only to very small numbers of students. According to our estimates, only 2-3% of the CTI trainees benefited from OJT programs.

### ***Supportive services/tutoring***

The kinds and amounts of supportive services offered to students were diverse. The diversity was driven in large part by different kinds of needs among the collaboratives, and from county to county. Some collaboratives offered most supportive services through the WIB, usually at One-Stop centers. One collaborative offered many of its supportive services through its partner community-based organization. Many collaboratives drew from numerous sources, such as unions, adult schools, and the employers themselves, to put together a package of services that would help CTI students complete their training. The collaboratives appreciated being able to use CTI grant funds to cover items not usually covered by WtW or WIA formula funds, or by other agencies, such as books and uniforms, shoes, fingerprinting, lodging, and tuition. Tutoring and classes in Vocational English as a Second Language (VESL), services not normally offered, also were available. Sites considered their “flexibility in funding” to be a great plus in providing effective training. Childcare and transportation were services most in demand, although for the WtW trainees, these services were paid with WtW funds.

### ***Other-language training***

Several sites offered training in Spanish for IHSS workers, useful in many situations where Spanish-speaking workers are needed in homes where the client was Spanish-speaking. In another training program, both Spanish and Chinese bilingual instruction were available for a

slightly higher fee. According to the program liaison, most students in this program passed the CNA exam the first time, and virtually all passed the second time.

### ***Career ladder***

The career ladder concept existed in theory, with about 80% of participants wanting to move up the career ladder, as indicated by training satisfaction questionnaires (Appendix A). An important element of the program was educating people not just about job tasks but also about job possibilities, so that participants would think about career ladders and expanded opportunities from more education. One CTI coordinator stated that the career ladder opportunities are good, and the participants “wouldn’t have looked at the psychiatric technician or LVN under a regular program because they were too expensive, but this opens doors to other programs.”

### ***Fast-track training***

One collaborative in particular was very pleased with its “fast-track” training program that compressed 16 weeks into 5 weeks. If students met certain academic eligibility criteria they were admitted to the fast-track program that provided on-site training at the worksite. It enabled the program to serve more people. At another site a one-year fast-track program was developed for Psychiatric Technicians. That program led to two additional start dates every year so that the site trained three cohorts each year, a total of 180 students.

### ***Coordinated services***

Several project coordinators felt that having the collaboration resulted in better services. By merging two funding sources, the program “has been a good stab at making education providers coordinate with WIA and WtW. The money helped bring people together to do something like assisted partnerships.” Coordinators also commented on the fact that articulation agreements and cooperation between previously competing educational providers meant that the providers could be more efficient in providing training. They were not competing for students but working together in a way that preserved time and training dollars. Another positive aspect was that the collaborative contained employer partners, so that there could be a more seamless movement for the participants from training program to employment. Employers were happy to know that they could get well-qualified workers, and trainees were happy to have immediate employment.

### ***Intensive case management***

Because of CTI funding, collaboratives were able to offer comprehensive individual case management. Many collaboratives funded special CTI case managers whose role was to focus on CTI enrollees, being available to help them during the training period. The case manager often was available to offer advice and assistance to students with diverse needs and concerns. Most collaborative directors felt that this was a positive part of the program, stating that when more attention is paid to the students, satisfaction increases, class absences decrease, and retention increases. One CTI coordinator told us that the “dropout rate has been reduced with intensive case management.” In conjunction with this was the mentoring concept. While several sites had discussed this as one of their innovative approaches, it was never embraced fully.



### ***Upgrading facilities***

A number of collaboratives used CTI funding to furnish and upgrade teaching space. This was more complex for clinical instruction, where classrooms have high equipment needs, such as mannequins, hospital beds and equipment, and working bathrooms. One site allocated \$650,000 in its proposal budget to convert about 5,000 square feet of existing space into classrooms, computer labs, and skills labs. Here, the infrastructure is in place so that training will continue past the end of the CTI project.

### **Challenges and barriers**

#### ***Unanticipated administrative difficulties***

When we asked the CTI program coordinators what was surprising or unexpected about the program, many did not expect that the program would be as difficult to run, nor did they anticipate the difficulties that arose working with partners and training providers (See Appendix C). Problems pertained to costs, communication, getting students to complete paperwork, keeping case managers informed about problems or changes, and dealing with partners who were not always cooperative. One stated that working with a community college was difficult because the college leadership showed no interest in creating new programs, in spite of apparent need.

#### ***Scheduling of educational programs difficult***

There were issues with scheduling due to the fact that training programs started only on a semester or quarterly basis, and that in cases where people needed pre-requisites that took longer than the program's short-term allowed. The CTI coordinator survey indicated that most of the training programs were on a semester or a quarter system at the community colleges, and these systems did not match well with the timing of the grant. Also, there were problems with completing the pre-requisites concurrently with CTI training. This prevented many people from completing training within the grant's time frame.

#### ***Shortage of nurse instructors***

Effective training begins with qualified instructors, and an expanded healthcare workforce requires an expanded pool of nurses and nurse educators. Developing this instructor pool was a challenge for many sites and will require specific attention in current and future program design. We frequently heard that there were not problems finding potential students, but there were problems finding classroom spaces for the students, simply because there were not enough teachers. Challenges of securing nurse educators have become crucial in California's shortage environment. The issue is compounded by increases in salaries offered by hospitals to nurses, while community colleges continue to pay low and fixed faculty salaries.

#### ***Childcare and transportation -- the most-needed services***

Childcare is important for both WIA and WtW participants although it may be more important for WtW clients because more of them have children. Our data indicate that 75.7% of the WtW clients have children living with them, compared with WIA clients, where 60.9% have children. These services are sometimes offered erratically; one site did not offer childcare unless

clients specifically asked. Twelve of the 98 dropouts who were interviewed in the Early Departure survey indicated they needed more help with childcare. At one site, childcare was available at the One-Stop center, but at most collaboratives participants had to make their own arrangements. Then, too, there were problems with backup, if, for example, a child became ill and couldn't use regular childcare arrangements.

One of the more rural sites was innovative in its use of CTI funds to secure several vans used to transport students from remote areas to classes. Another collaborative used gasoline vouchers, and many used bus passes. Two rural collaboratives offered overnight accommodation for students so that they would not have to drive several hours each day to attend classes. It is not clear whether students would have been able to attend class without these special services.

### ***Need for more services***

Some CTI trainees required more extensive support services. First, although childcare and transportation were available for all CTI participants, some left the program because they needed more comprehensive services, including twelve who dropped out because of problems with childcare. Twenty-one of 98 of the dropouts interviewed reported scheduling problems and 31 had family or personal problems. It is possible that some of these issues could have been addressed if more and different kinds of supportive services were available. Different scheduling, tutoring, and more flexibility with absences and timing were also mentioned as factors that would have helped students stay in the program (see the Dropout Survey results in Appendix D).

### ***On-the-job training -- very desirable but not widely used***

CTI coordinators admitted that the demand for on-the-job training was far greater than the supply of classes. The need was especially apparent among lower-income workers who cannot survive on reduced hours and income while attending a training program. One collaborative was "flooded with calls for the LVN program," but many of those interested could not participate because they also needed to support themselves during training. Even CNA candidates with a relatively short training period had difficulties living briefly on a reduced income. As one coordinator stated, "Barriers exist because people cannot support themselves while in training."

OJT was used only minimally in this program. Two site administrators mentioned that the high demand for CNAs had a negative impact on potential OJT programs. Because the demand was so high, local employers did not need the enticement of an OJT program, and also, OJT would have been more expensive than simple financial assistance. Another collaborative administrator stated that she "didn't see how OJT training could really fit under CTI," and that students were immediately hired after graduation anyway. Another felt that it was inappropriate due to constraints at the training sites. However, one site coordinator was very happy with OJT, and considered it a successful activity.

### ***Cash incentives rarely used.***

One site had a CTI-funded incentive program, in which participants were given cash incentives as they completed various stages of training. They received \$100 when CNA

certification is complete, with another bonus after working for a healthcare employer for six months. These incentives were very popular. At another site, one employer agreed to offer a \$2/hour wage increase for all incumbent workers who completed CNA training.

### ***Few mentoring resources***

Formal mentoring, where a volunteer-like person (usually someone who has completed CNA or LVN training) is assigned to act as a mentor to the student, was used at only one collaborative. It was, however, mentioned in several proposals, and one staff person even stated, “mentoring should be an existing part of all programs.” In our survey of CTI coordinators (Appendix C), we asked why mentoring was not used more consistently. Comments from the coordinators indicated that potential mentors were “too busy to become involved,” and “everyone wants to be compensated financially.” At one collaborative, mentoring was built into the original plan by the partner agencies, but over time they realized that the teaching faculty, with their wide access to students, were in fact functioning as mentors. Informal mentoring was more common in this program, where someone was available to assist in addressing the diverse needs of CTI participants.

## **Lessons and successes**

### ***There were more higher-level trainees than anticipated***

We asked the sites to supply us with type of training for each participant, because it soon became apparent that trainees would have to be evaluated differently, depending on the level of their training (this information was not available on the WIA database). While we did not receive complete information from all sites, we were able to match the type of training program with 4,644 participants, accounting for 78% of the total (see Table 7). For those reporting, over half (52.6%) were enrolled in CNA/HHA programs. There was a high proportion of CTI enrollees in LVN or RN training, about 12%. Despite the program’s CNA focus, some sites were willing to invest in longer and costlier nurse training programs, where they experienced higher needs. The IHSS enrollees were lower than anticipated, only about 11% (for reasons described earlier). Other training programs, including medical assistants and psychiatric technicians, accounted for 21.6% of the trainees.

**Table 7. Type of Training Program, by Site**

Training Site	IHSS	CNA/HHA	LVN/RN	Psychiatric Technician	Medical Assistant	Other	Missing*
Kern	0	539	124	0	0	0	0
Long Beach	377	118	33	0	0	0	0
NoRTEC	55	175	65	0	0	5	575
North Bay	0	65	39	38	18	44	75
Riverside	5	256	133	0	0	20	0
Sacramento	0	331	57	14	0	76	52
San Diego	8	273	8	0	34	7	73
San Francisco	60	107	23	0	17	89	53
San Jose	0	150	7	0	25	48	205
SELACO	0	288	45	0	0	0	4
Ventura	0	16	6	0	8	0	58
West Hills	0	127	29	40	121	399	325
Unknown	0	0	0	0	0	0	114
Total	505	2445	569	92	223	688	1408

Source: CTI Baseline Information Form follow-up, 2001-2002.

### ***LVN programs a good investment***

When asked after the program what they would have done differently, a couple of CTI coordinators stated they would focus more on LVNs. The “LVN course was a big hit.” The LVN training program had positive outcomes:

*“We would focus more on the higher skilled occupations, such as LVN and RN candidates. While they cost much more per person, on the average, the success rate is much higher and seems a better way to expend limited funding.”*

### ***Regional training resources organized and coordinated***

In general, the overall impact of the collaborative effort on the training programs was positive. Especially in urban areas, collaboration resulted in less competition and more efficient use of resources. Administrators stated they were better able to meet student needs because of CTI’s cooperative atmosphere. Collaborative-wide training programs can provide more flexibility and offer students more training options. As one CTI coordinator stated, “I was extremely pleased working with the various training providers in our area. I learned a great deal from them and am grateful for the relationships that have been established as a result of this project.” And another: “We were able to build some strong coalitions through this grant that will be sustainable beyond this grant.”

### ***High satisfaction overall with CTI training***

Nine of ten students were satisfied or very satisfied with the overall quality of the program. There were high levels of satisfaction with instructor preparation, class presentations,

level of difficulty, usefulness of classes, how much instructors cared about the students, how much they helped them, program flexibility, location, and ability to practice skills on real people. Appendix A includes a complete overview of the program satisfaction findings, both during and after the program.

### ***Fast-track training -- popular and efficient***

Several collaboratives developed a fast-track option for the most promising trainees. For students who were well prepared and able to adapt, this meant that training could be completed in a fraction of the time required for regular programs. It was not appropriate for all students, since it was, as its name implies, fast-paced.

### ***Case management-- an important component***

The importance of intensive case management, possible with CTI funding, was acknowledged by students and staff alike. Students reported that for the first time they were being treated with respect, and many talked about improved self-esteem and a stronger commitment to the program. Staff reported that case management helped prevent behaviors (e.g., missing classes) leading to program non-completion.

### ***Flexibility of CTI funding to provide support services***

Most supportive services for CTI participants were offered through the local WIBs. However, many of the collaboratives supplemented these with additional services from a wide range of partners, including CBOs, unions, Offices on Aging, and adult schools. The flexibility of CTI funding helped in purchasing, for example, fees, books, uniforms, fingerprinting, and tuition.

### ***Distance learning was both more and less successful than anticipated***

Sites that intended to use distance learning were daunted by the combination of planning, preparation, and technology that was required to actually implement it. Thus, it was a good idea that fell by the wayside. Where used, it was very effective in consolidating resources, reducing transportation needs, and keeping students closer to home.

## IV. HOW SUCCESSFUL WAS THE PROGRAM?

### A. WHO ARE THE PARTICIPANTS?

Regarding the makeup of those participating in the program, Table 8 below shows demographic characteristics of all participants, and compares those supported by Welfare-to-Work funds with those supported by WIA funds.

#### **Participant characteristics, by WIA and WtW eligibility**

*WIA-funded participants had fewer barriers than the WtW-funded participants, with fewer children, more education, fewer minorities, and stronger work histories.* Based on the WIA data that each site submitted to California's Employment Development Department, we identified a total of 5,816 participants in the CTI program. About 30% of the participants were supported by WtW funds, with the majority enrolled in the WIA program.<sup>1</sup> Most were female, more so among the WtW participants. Most were minorities (70%), with more African Americans and Hispanics in the WtW group, and more Asian-Pacific Islanders in the WIA group. The WIA participants were older, with some what more education than the WtW workers. The WtW group had more children than the WIA group, a mean of 1.9 versus 1.0 children.

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<sup>1</sup> WIA and WtW participation was determined by the grant code reported for each participant in the WIA database. A grant code of 607 indicated WIA participation and a grant code of 798 indicated WtW participation. A small number of participants had both WIA and WtW grant codes; we identified these individuals as WtW participants only to create mutually exclusive groups.

**Table 8. Demographic Profile of CTI Participants by WIA/WtW Groups**

	CTI-WIA Participant	CTI-WtW Participant	Total Participants
<u>Number</u>	<u>4,122</u>	<u>1,694</u>	<u>5,816</u>
Female (%)	86.3%	92.8%	88.2%
<u>Ethnicity</u>			
African American	16.0%	24.3%	18.4%
Asian/Pacific Islander	16.5%	10.4%	14.7%
Hispanic	28.6%	36.0%	30.7%
Non-Hispanic White	33.0%	24.4%	30.5%
Other	6.0%	5.0%	5.7%
<u>Age</u>			
Under 21	19.4%	16.5%	18.6%
21 to 30	29.5%	41.5%	33.0%
31 to 40	22.1%	26.5%	23.3%
41 to 50	18.1%	12.9%	16.6%
Over 50	11.0%	2.7%	8.6%
Mean/Median	33.1/31.0	30.1/28.0	32.2/30.0
<u>Educational Attainment</u>			
Less Than High School	19.2%	35.5%	23.9%
High School Grade / GED	51.9%	49.5%	51.2%
Post High School Education	22.0%	12.0%	19.1%
College Graduate	6.9%	3.0%	5.8%
<u>Number of Dependents</u>			
Zero	50.1%	13.2%	39.3%
One	20.4%	30.7%	23.4%
Two	17.6%	29.4%	21.1%
Three or more	11.9%	26.7%	16.2%
Mean/Median	1.0/0.0	1.9/2.0	1.2/1.0
Pct. Non-Citizen	15.6%	13.8%	15.1%
Pct. Limited English Speaker	10.3%	12.8%	11.0%

Source: WIA and WtW enrollment data, EDD, 2001-2002.

Not surprisingly, the WtW-eligible participants have much more welfare use than the WIA participants (see Table 9). More have received welfare, and the average number of months on welfare is 17 versus 5 for the WIA group.

The differences in training types by group (Table 9) are glaring. This is expected since the type of training is driven in large part by educational background. Based on almost 3,000 participants for whom we have training information (and who are matched with the WIA/WtW data), about three-quarters of the WtW group and one half of the WIA group received CNA

training (75.6 versus 54.4%). Many more in the WIA group received LVN or RN training (18.5% versus 4.4%). Based on the WIA data, about 11% altogether were classified as program dropouts. The dropout rates are somewhat higher for the WtW group.

**Table 9. Welfare History and Training Types of CTI Participants**

	CTI-WIA Participant <i>N</i> =4,122	CTI-WtW Participant <i>N</i> =1,694	TOTAL Participants <i>N</i> =5,816
Ever Received Welfare (1987-2001)	41.7%	76.3%	51.8%
Ever Received Welfare (2000-2001)	18.0%	60.6%	30.4%
Received Welfare at Intake	10.7%	54.1%	23.4%
<u>Months on Welfare (1998-2001)</u>			
None	75.7%	33.8%	63.5%
1 to 12	8.6%	17.9%	11.3%
13 to 24	6.2%	13.9%	8.4%
25 to 36	5.1%	14.1%	7.7%
37 to 48	4.4%	20.3%	9.1%
Mean/Median	5.2/0.0	17.2/12.0	8.7/0.0
<u>Type of Training</u>			
CNA/HHA	( <i>N</i> =2,010) 54.4%	( <i>N</i> =968) 75.6%	( <i>N</i> =2,978) 61.4%
IHSS	7.4%	3.1%	6.0%
LVN/RN	18.5%	4.4%	13.9%
Other	19.7%	17.0%	18.7%
<u>Training Exit Status (as of 4/03)</u>			
Still Enrolled	30.5%	24.4%	28.7%
Entered Employment	36.7%	40.6%	37.9%
In Add'l Ed/Service	0.4%	0.4%	0.4%
Completed Ed/Services	19.9%	18.0%	19.3%
Soft Exit	0.1%	0.0%	0.1%
Dropout	10.3%	14.3%	11.4%
Other	2.2%	2.4%	2.2%

Source: WIA and WtW enrollment data, EDD, 2001-2002; CTI Baseline Information Form follow-up, 2001-2002; MEDS Files, DHS, 1987-2001.

From Baseline Information Form data, we know more about the home lives and work histories of 4,133 responding CTI participants. Overall, three in ten participants are married, but only two in ten of the WtW participants are married (Table 10). While two-thirds of all participants have children at home, the proportion is higher for the WtW group, over 82%. Compared to the WtW participants, more of the WIA participants said they worked in the past year (63% versus 50%), had a job in healthcare (36% versus 25%), and had previous training in health care (39% versus 32%). More in the WIA group also have other working adults in the home, and own a car. About a quarter of the WtW group heard about the program through a county worker, but otherwise, the recruiting differences between the two groups are negligible.



**Table 10. Demographic Profile of CTI Participants, from Baseline Information Forms**

	CTI-WIA Participant	CTI-WtW Participant	All CTI Participant
<u>Number of Participants with Baseline Forms</u>	<u>2,785</u>	<u>1,348</u>	<u>4,133</u>
<u>Marital Status (%):</u>			
Married	33.4%	21.9%	29.7%
Separated	7.0%	14.8%	9.5%
Divorced	13.3%	10.2%	12.3%
Widowed	2.0%	1.3%	1.8%
Never Married	39.2%	47.3%	41.9%
Ref/Unknown	5.1%	4.5%	4.9%
<u>Children Living with You (% Yes)</u>	55.4%	82.3%	64.2%
(if yes) Mean number under 5	0.7	0.8	0.8
(if yes) Mean number 5-17	1.2	1.3	1.2
<u>Regularly Care for Someone (% Yes)</u>	33.0%	27.3%	31.1%
(if yes) Are you paid (% Yes)	56.4%	42.4%	52.4%
(if yes) Is it a relative (% Yes)	33.4%	42.9%	36.1%
<u>Worked Last Week (% Yes)</u>	47.0%	32.3%	42.2%
(if yes) Mean number of hours	31.8	28.9	31.1
<u>Worked in Past Year (% Yes)</u>	63.2%	50.2%	59.0%
(if yes) Mean number of weeks	35.4	31.3	34.3
<u>Health-Care Related Job in Past Year (% Yes)</u>	35.6%	24.7%	32.1%
(if no) Health-care job ever (% Yes)	18.7%	17.2%	18.2%
<u>Previous Training in Health Care (% Yes)</u>	38.8%	31.9%	36.5%
<u>Other Adults in Home Work Full-Time (% Yes)</u>	42.7%	27.1%	37.6%
(if yes) Mean number who work full-time	1.3	1.4	1.3
<u>Other Adults in Home Work Part-Time (% Yes)</u>	11.5%	7.4%	10.2%
(if yes) Mean number who work part-time	1.2	1.2	1.2
<u>Own a Car (% Yes)</u>	67.7%	52.5%	62.7%
<u>Heard About the Program from ...(%):</u>			
Newspaper ads	7.2%	6.3%	6.9%
Bulletin boards/posters	3.0%	2.5%	2.8%
Newsletter/mailling	3.9%	3.6%	3.8%
County worker	9.8%	25.3%	14.8%

Someone else	29.4%	23.8%	27.6%
TV/radio	1.5%	1.2%	1.4%
Brochures	5.4%	3.3%	4.8%
Job fair	0.8%	0.5%	0.8%
Web-site	0.2%	0.2%	0.2%
School	3.0%	1.1%	2.4%
Career Center	1.5%	0.6%	1.2%
Employer/At Work	0.4%	0.4%	0.4%
Union	1.0%	0.5%	0.9%
Other	32.8%	30.6%	32.0%

Source: WIA and WtW enrollment data, EDD, 2001-2002; CTI Baseline Information Form, 2001-2002.

### **Participant characteristics, by collaborative site**

*CTI populations varied a lot among collaboratives, due in large part to the characteristics of each area's population and training focus, but some collaboratives appeared to work harder to recruit WtW clients. Tables 42-E through 45-E in Appendix E provide demographic information for each collaborative site. To summarize some differences:*

- Most were women, more so at SELACO, which also had the largest proportion of Hispanic participants, over two-thirds (68%).
- Long Beach, Sacramento, and San Jose had the highest proportion of African American participants, over one-third.
- Non-Hispanic whites were the minority, except for NoRTEC, where three-quarters of participants were non-Hispanic white.
- Kern participants were the youngest (28.1 mean years), and Long Beach, the oldest (42.9 mean years).
- Educational attainment was lowest for SELACO, and highest for North Bay.
- Riverside and SELACO participants have the most children (mean 1.7 and 1.9, respectively).
- San Francisco has more limited-English speaking participants (28.7%).
- Average months on welfare ranges from 22.8 at SELACO to 5.5 at Long Beach.

This information, by collaborative, is broken down further in Appendix E for the WIA and WtW sub-groups, Table 44-E for those in the WIA group and Table 45-E for those in the WtW group. Summaries of these tables are also included in the Appendix.

### **Participant characteristics, by training type**

*When the various types of training groups are compared, the LVN/RN group is the most unique, no doubt because these programs are more selective with more pre-requisites. In summary, the LVN/RN trainees seem better off in terms of education, prior work, and car ownership than the other groups. CNA trainees, at the other end of the spectrum, seem to be more challenged with the most children, the least education, the least work experience, the most welfare experience, and low car ownership.*

We divided the CTI participants into four training groups, based on information sent to us by the 12 collaborative sites. The groups were those trained for IHSS work (N=180), CNA/HHA

(N=1,824), LVN/RN (N=412), and other (N=560) training. The other training category includes participants trained for occupations such as psychiatric technicians and medical records. We did not receive training information for 2,840 participants, because some sites did not fully comply with our request for this information. Comparing the WtW and WIA groups, more in the WtW group received CNA training (43% versus 26%) and more in the WIA group received LVN or RN training (9% versus 2.5%). Group comparisons are presented in Table 46-E, Appendix E, and show notable differences.

Gender, ethnicity and age--While all categories are mostly female, the CNA group is even more so, over 90% female. Ethnicity varies greatly. While only 6.7% of IHSS workers are non-Hispanic white, 39.2% of nurse trainees are. Almost 40% of CNA trainees are Hispanic compared with 22% of nurses. Except for IHSS trainees who are noticeably older, the groups are similar in age.

Education--Nurse trainees have the strongest educational background, but IHSS trainees have the largest proportion of college graduates, 13.3%. The IHSS group also has the largest proportion with less than a high school education, making this group the most diverse, educationally.

Dependents--The IHSS group has the smallest mean number of dependents, only 0.8, compared with 1.4 for CNA trainees.

Welfare use--Most of the CNA trainees, over 60%, received welfare at one time, compared with only 27% of IHSS worker trainees. The mean number of months on welfare was 12.1 for CNA trainees and 3.8 for nurses.

Exit status--Only 2.8% of IHSS workers were classified as WIA dropouts, compared with one in ten for CNA and nurse trainees, and one in four for the “other” category.

Marital status and children (from the Baseline data)--Almost half of the reporting IHSS workers are married compared with only a quarter of CNAs and a third of nurse trainees. About seven in ten CNA trainees have children in the home.

Prior work--Two thirds of IHSS workers, 28% of CNAs and 39% of RNs/LVNs provide care regularly. Over two-thirds of nurse trainees reported working in the prior week, twice as high as the CNAs.

Car ownership--Most of the nurse trainees, 82%, owned a car compared with just over half of the IHSS and CNA trainees.

### **Comparing participants with non-participant WIA and WtW groups**

*CTI participants differ from their respective WIA and WtW comparison groups.* Using data from the statewide WIA and WtW datasets, we compared our WtW and WIA CTI participants with other general (not just health) training program participants.<sup>2</sup> This comparison does not control for pre-existing differences among the comparison groups; the multivariate analyses that follow will do that. Findings on the WIA and WtW comparison groups are presented in Table 47-E, Appendix E, with summaries below.

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<sup>2</sup> The WIA comparison group includes those who entered the WIA system during one year only, 2002, whereas the WtW group and both CTI groups include those who entered training any time during a two year period, 2001 and 2002.

#### WIA: CTI versus non-CTI

- The WIA CTI group has 4,122 and the WIA non-CTI group has 8,452 participants.
- The CTI group has many more women (86% versus 50%).
- The CTI group has fewer whites and more African Americans and Asians.
- The CTI participants are younger with a mean age of 33 versus 37 years.
- The CTI group has twice as many months average (5.2 versus 2.7) on welfare.

#### WtW: CTI versus non-CTI

- The WtW CTI group has 1,694 and the WtW non-CTI group has 6,354 participants.
- The CTI group has more women and is younger than the non-CTI group.
- There are few differences in ethnicity.
- The CTI group is better educated, with only 35% versus 54% having less than a high school education, and 15% having some education past high school (versus 6% for non-CTI).
- There is little difference in English-speaking ability or citizenship status.
- The CTI group has fewer months average on welfare (17 versus 25).

In summary, the WIA comparison group has more males, uses welfare less, and is older than the CTI WIA group. The WtW comparison group tends to lie in the other direction, with less education and more welfare use than the CTI WtW group. These findings indicate the need to make cautious comparisons, and to control for differences.

#### **Comparing participant CNAs with non-participant CNAs**

*CTI CNAs differ from non-CTI CNAs, largely because CTI includes more welfare clients.* For this portion of analyses, we focused only on the CNA group because this was the largest group of CTI participants, and because we had access to CNA data that allowed meaningful comparisons. We merged CNA administrative data files that contain CNA dates of certification, with the WIA and WtW datasets. We then selected CNAs certified in 2001, 2002, or the early part of 2003. If the CNA had a certification date later than the WIA/WtW enrollment date the CNA was classified into one of four groups. If the CNA was not enrolled in WIA or WtW the CNA was classified into a non-WIA/WtW group. This gave us five groups (See Appendix E, Table 48-E):

1. WIA CTI group with 1,578 CNAs
2. WIA non-CTI group with 347 CNAs
3. WtW CTI group with 776 CNAs
4. WtW non-CTI group with 887 CNAs
5. The remaining 43,028 CNAs with no WIA, WtW, or CTI affiliation.

CNA-only findings for within-WIA group and within-WtW group analyses are presented in Table 48-E, “Demographic Profile of Newly Licensed CNAs by Program Participation” in Appendix E. Below is a summary of the CTI/non-CTI differences within WIA and WtW groups.

#### WIA CNAs (groups 1 and 2)

- The CTI group had more non-Hispanic whites (32% versus 22%) and fewer African Americans (14% versus 21%).
- The CTI group was younger, with about one quarter under 21, compared with 12% for those in the non-CTI group.
- The CTI group was somewhat better educated, with only 20% versus 26% having a less than high school education.
- The CTI group had fewer children on average (1.1 versus 1.3).
- The CTI group had fewer non-citizens and fewer with limited English.

#### WtW CNAs (groups 3 and 4)

- There were more non-Hispanic whites (19% versus 11%), and fewer African Americans (25% versus 45%) in the CTI group.
- The CTI group was somewhat better educated, with almost thrice as many having some post high school education.
- Both groups were similar in age.
- The CTI group had fewer mean months (18 versus 32) on welfare.

The employment history of CNAs shows some differences for general employment, particularly for WtW CTI and WtW non-CTI group comparisons (Table 49-E). In general, WtW non-CTI CNAs were employed fewer quarters than their CTI counterparts during 1999 and 2000, had fewer quarters with the same employer, and had substantially lower earnings. WtW CTI participants in 2000 earned about \$8,180 compared with \$4,680 for the WtW non-CTI group (adjusted to 2003 dollars). There was little or no difference for health services employment.

#### All CTI CNAs and other CNAs (groups 1+3 and 5)

Regarding gender, 14.1% of the non-WIA/WtW CNAs are male, compared with only 10.8% of the CTI group. Age differences are negligible. The major difference is that the larger CNA population has a much briefer use of welfare. Only about 18% of the non-WIA/WtW CNAs had received welfare during 2000-2001, compared with 56% of the CTI group. The mean number of months on welfare differed also. For the CTI WtW group, it was 17.8 months, for the CTI WIA group, it was 6.2 months, but for the non-WIA/WtW CNAs, it was only 5.1 months. The CTI CNAs were more likely to use welfare, and to use it longer. Thus, it will be important to control for welfare differences in later analyses of CNAs.

Later analyses in this report of CNAs focus on CTI trainees only (groups 1 and 3) and on the non-WIA/WtW 43,028 CNAs due to the small sample sizes of groups 2 and 4.

### **Program Dropouts**

We surveyed 99 dropouts, and examined administrative data on 665 dropouts, to learn more about who does not complete training, and why. The first group described includes the 99 dropouts surveyed by the evaluation team.<sup>3</sup> The numbers of completed interviews per site range

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<sup>3</sup> The collaboratives provided us with a total of 226 names and phone numbers of people leaving the CTI program prior to completion, but 49 had incorrect phone numbers, 69 could not be reached, and 9 refused to be interviewed. The numbers of interviewees by site are shown in Table 34-D, Appendix D, "Early Departure Surveys, by Site."

from one to 28, with the largest concentrations of interviewees from Kern, Sacramento, and Long Beach sites. This was expected because these focus sites had more frequent contact with the evaluation team. The second group described was obtained from the WIA dataset, where 665 CTI dropouts were identified from the “training exit status” question. We compare this group of 665 with the 5,151 CTI participants who remained in the program. While major findings pertaining to dropouts are presented in this section, Appendix D is devoted to a more detailed analysis of dropouts.

### ***Reasons for dropping***

*Most people drop out of the program because of personal reasons.* We asked the 99 survey respondents why they decided not to participate in the program (Table 35-D in Appendix D). About 26% gave finance-related reasons (i.e., decided to work, or couldn’t afford program). Those departing said they could not afford training or they had found a job and decided to work instead. Most of the reasons were personal, such as not having the time, childcare problems, family/personal problems scheduling problems, or too much stress. Only 7 people said that they discovered they were not interested in the subject matter. It is interesting that despite childcare and transportation assistance offered at all the sites, these were still problems for a number of people.

The 65 people who started but did not complete the program were asked why they decided not to finish (Table 35-D). Most said they did not have time for the homework. Only a handful said they did not like the classes, patient care work, or the teacher. Most of these problems, again, were personal rather than program-related. The “other” category included personal or family situations (7 people), too much work (3 people), health problems (3 people), scheduling (1 person) and problems with the exams (1 person).

When the 99 respondents were asked if they would like to come back into the program at a later time, about seven in ten said they would, 10.1% said maybe, and 18.2% said they would not (table not shown). A very high proportion said that they would recommend the program to a friend (87.8%), 2% said they would not, and 9.2% said that maybe they would recommend it.

We asked if there was anything the program could have done to help respondents stay in the program. Almost half (45.2%) said that there was nothing. When asked what would have helped them stay in the training program, 28% mentioned a different scheduling arrangement, and 8% mentioned more flexibility with absences and times. Fifteen people (30%) agreed that more money would have helped and three people would have preferred less demanding and/or fewer or shorter classes. In general, based on a very small sample, with the exception of providing different scheduling and more tutoring (offered by many collaboratives) there was little the CTI program could have done to retain these individuals.

Finally, from comparing prior work experience with future plans, we determined that those dropping out of the program are more likely to want to return to health care if they have prior healthcare experience (See Appendix D, Table 36-D). In other words, those with

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With the exception of three sites that provided no names to the evaluation team, the dropout lists range in size from 3 to 89 names per site.

experience are less likely to be permanent dropouts. These findings are supported by more quantitative analyses that follow in this report.

### ***Do reasons for dropping out differ by site?***

Because of the low numbers in the survey group, we were able to compare only three sites where numbers of surveyed dropouts, ranging from 18 to 28 per site, were large enough for comparison. These numbers are still small, so findings must be interpreted cautiously. Among the three sites, Kern, Sacramento, and Long Beach, there were some differences. For example, over half of those at the Kern site stated as a reason for dropping out “having family or personal problems” compared with just a quarter or less at the other two sites. Scheduling was not so much a problem at the Sacramento site, but more so at the other two sites. Only 4% in Kern had transportation problems compared with 17% and 18% at the other two sites.

### **Comparing dropouts with program completers**

*There are some discernable differences between those completing the program and those dropping out of the program.* Tables 37-D and 38-D in Appendix D include data obtained from matching with the WIA database, and Table 39-D uses data from the Baseline Information Form. While gender is similar across groups, dropouts tend to include more African Americans and fewer Asian/Pacific Islanders, and to be younger than the program completers (Table 37-D). Dropouts have somewhat less education, but fewer are non-citizens or have limited English. Dropouts are also less likely to be married (Table 39-D) and have a weaker work history than those remaining in the program. Fewer dropouts, compared to non-dropouts, regularly cared for someone (24% versus 32%), worked in the last week (32% versus 46%) or in the past year (47% versus 61%), or had a health-care related job in the past year (24% versus 33%). Fewer dropouts (51% versus 64%) owned a car.

The survey group (last column in Tables 37-D to 39-D) is similar to the larger WIA-identified group of 665, although the survey group includes more African-Americans, and surveyed individuals had somewhat fewer dependents.

The employment history of dropouts shows some differences for general employment, for both the CTI and the non-CTI group comparisons (Table 40-D in Appendix D). In general, the dropout groups were employed fewer quarters during 1999 and 2000, they had fewer quarters with the same employer, and their earnings were lower. For the CTI participants, those remaining in the program earned about \$1,900 more than the dropouts in 2000 (adjusted to 2003 dollars). There was little or no difference for health services employment.

Figures 1-D and 3-D (Appendix D) echo these differences, which are magnified after the training period. After training, employment rates are higher for the non-dropouts, and earnings are substantially higher. While there is little or no difference for health services employment prior to the training period, after training, the proportion of CTI trainees in health care rose to about 50%, compared with only 16% for the dropouts (Figure 2-D).

## **Predictors of CTI participants dropping out**

In order to determine predictors of dropping out of the program, we used merged WIA and Baseline data from the CTI group (N=2,158) and conducted a logistic regression analysis. This analysis can control for a number of variables, and determine the relative impact of each. The predictor variables include type of training group, recruitment by established channels, recruitment by “someone else,” age, gender, ethnicity, education, marital status, regularly caring for someone else, non-citizenship, limited English, number of months on welfare, number of quarters employed outside of health services, number of quarters employed in health services, and the regional employment rate. Results, shown in Table 41-D, Appendix D, indicate several significant predictors.

Those who were in a CNA training group were 11% less likely to drop out, and those in IHSS training were about 20% less likely, relative to those in other types of training. These are both reflections, no doubt, of the length of the training programs. The IHSS training, for example, was only 40 hours total. Type of recruitment seemed to have an impact too. Those who heard about the program through established channels (such as a county worker) were 7% less likely to be a dropout, while those who heard from “someone else” were 5% more likely to drop out, relative to those who heard through other channels. Those who regularly cared for someone else and those who owned a car were less likely to drop out. Those who were African-American were 4% more likely than whites to drop out.

In summary, dropouts had different characteristics than non-dropouts both prior to, and after training, when work and earnings were significantly higher for the non-dropouts. Dropouts had more barriers, such as less education, weaker work history, and less car ownership. Predictors of not dropping out included a shorter training program, recruitment through established channels, car ownership, and regularly caring for someone else.

## **B. HOW SUCCESSFUL WAS CTI AT THE INDIVIDUAL LEVEL?**

### **Turnover and retention**

In this section, we first describe the impact of dementia on retention, which was of special interest to the State. Next, we turn to analyses over time of employment in the work force in general, and of employment in the health care industry. Determination of employment is based on EDD’s Base Wage File statewide administrative data from 1998 through 2002. The Standard Industrial Classification (SIC) included in the EDD Covered Employment and Wages program (or ES-202) files identifies individuals working in a health care industry (2-digit SIC: 80). The Base Wage and ES-202 data do not necessarily capture all of those who are working in health care, nor do data allow us to identify whether or not someone works as a caregiver.<sup>4</sup> Due to these data limitations, the reported estimates for healthcare work are probably skewed downward. For the employment and earnings outcomes analysis, an individual’s employment status each quarter is adjusted so it is relative to the quarter that the participant exited the training program. For example, “Exit Quarter” employment status for a participant who exited in the

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<sup>4</sup> The Base Wage and ES-202 data cover individuals with unemployment insurance covered employment in California, which includes about 95% of the California workforce.



second quarter of 2001 reflects her employment status in the second quarter of 2001, while someone who exited in the second quarter of 2002 will have “Exit Quarter” employment status that reflects her employment status in the second quarter of 2002. The employment and earnings outcomes discussed in this report cover participants with exit dates no later than the second quarter of 2002 (i.e., all participants for whom we could identify exit date and who had at least two quarters of post-exit data).<sup>5</sup>

### ***What is the impact of dementia in patients on caregiver retention?***

*Results from this study are inconclusive and do not indicate whether dealing with patients with Alzheimer’s or dementia contributes to higher staff turnover.* There is little information available about the impact of patient behavior on caregiver turnover and retention. Despite much research exploring reasons for nursing staff turnover, there is no literature about coping with dementia as it relates directly to retention. Some past research indicates that patient relationships are related more to staying on the job than to leaving. One study asked nursing assistants what was most important to them (Caudill & Patrick, 1991-92). The leavers indicated it was salary, while the stayers indicated that personal feeling for the patients was most important to them. Similarly, one study (Stamps, 1997) argues that the stress of challenging patients leads to more job satisfaction, as opposed to stress related to workload and interpersonal strain that leads to less satisfaction. On the other hand, a study of turnover in psychiatric settings found that work hazards, among other things, affects turnover (Alexander, Lichtenstein, Oh, and Ullman, 1998). Work hazards include the physical work as well as unpredictable behavior and even physical threats that can occur in psychiatric settings.

To understand more about the impact of Alzheimer’s disease and other mental disorders, we asked employers for their perceptions on how difficult it is for employees to work with these patients. According to the twenty employers interviewed, most dementia cases were due to older, rather than younger patients, a perception that probably reflects patient mix, especially in nursing homes. Twelve employers (60%) thought employees found these cases more difficult, five stated they found them about the same, and one thought they would find them easier because “they [workers] really don’t have the skills of interaction and language needed for those who can converse with them.” Those who stated there was no difference said:

*They’re just different. They are easier in some ways, for example, they are usually quite physically healthy. They walk around frantically, eat pretty well. They can last for years and years without medication or ambulation assistance. But they do need to be managed more creatively.*

At one hospital’s psychiatric unit, “the staff members...love their work and their patients.” The employer couldn’t compare them with non-psychiatric patients because there are none. Another employer stated that patients are moved to a special facility if they get to the combative or wandering stages causing more difficulty.

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<sup>5</sup> For comparisons between CNA groups the quarter of certification, not the quarter of program exit, is used as the benchmark period.

The effects of patients with mental disorders were hard to pin down. Two respondents speculated that “it has had some impact, just with the stress,” and “they do have higher turnover in the Alzheimer’s unit. It’s harder for the staff; they need more staffing.” Another claimed that there are “higher turnover because the agency has higher expectations of staff. It takes the right person.” This indicates that the turnover is sometimes a result of the employer’s actions and/or low staffing levels.

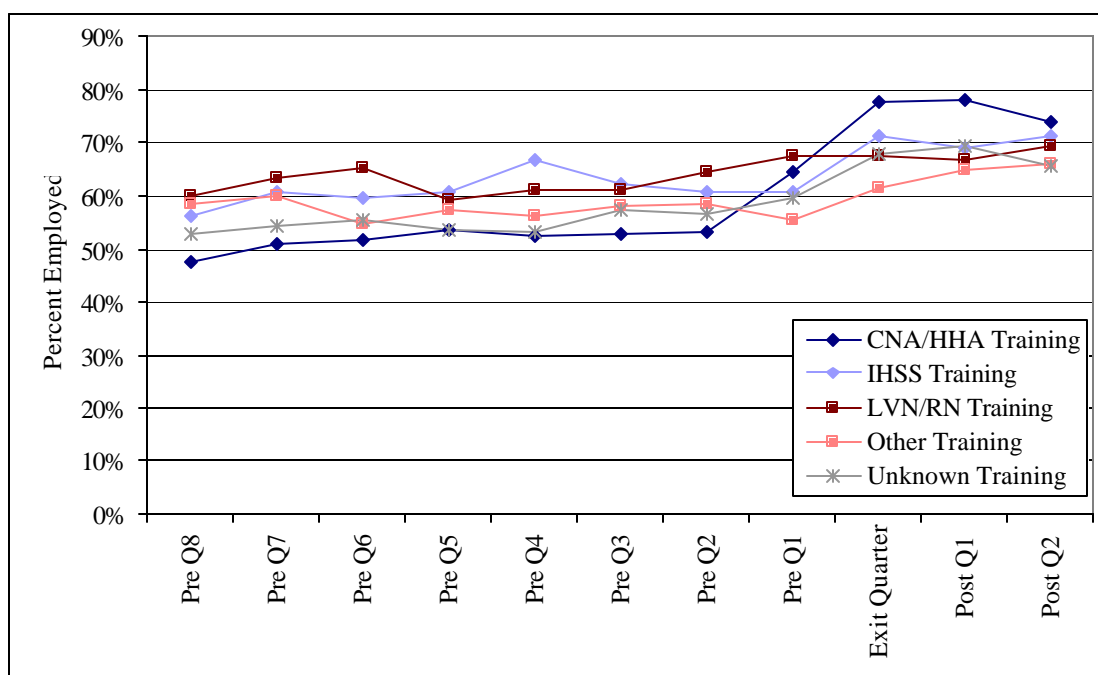
The majority of employers said that having patients with mental problems was not an issue in turnover, “because we have a great team and we provide dementia training,” or “they chose the field and they understand.” Or “in a facility geared to that, with a support system and extensive training, they do better.” Special training, and other supports like having a behaviorist as a consultant on the staff were mentioned as ways of making the job less stressful and more manageable.

To add another analytical dimension, we used EDD Base Wage data to compare turnover rates among psychiatric and other kinds of healthcare facilities in California. Some samples were small, under 300, but comparing percentages of CNAs employed after two years showed that psychiatric hospitals fared somewhat better than intermediate care facilities and nursing and personal care facilities (40% versus 29% and 37%). General hospitals had lowest turnover (70% employed after two years), but these hospitals also pay higher salaries. Salaries at psychiatric hospitals are higher, but not as high as those at general hospitals.

### ***Employment retention by training type***

*CNA trainees are the most successful training group in terms of both general and health care employment retention.* The chart below (Figure 1) compares employment status over time for the various training groups. The groups range in size with 1,004 having “unknown training status,” 1,119 in CNA/HHA training, 87 in IHSS training, 147 in LVN/RN training, and 346 receiving other training. (As noted above, the groups are relatively small due mostly to a lack of post-exit data.) All groups increased their percentage of employment over time. The largest increase was for the CNA training group, who increased from employment rates of 48% eight quarters before exit to 74% two quarters after exit. The smallest increase in overall employment was for the “other” group, who started at 58% and increased to 66% post-training.

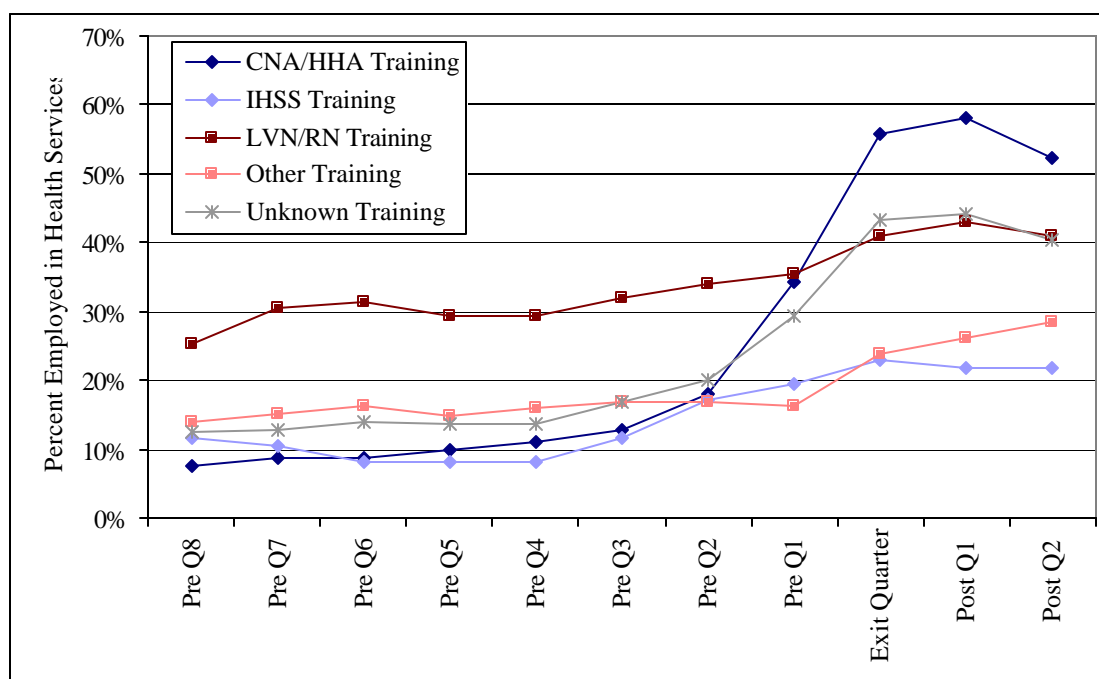
**Figure 1. Quarterly Employment Status for CTI Participants by Training Type based on Exit Date**



Source: CTI Baseline Information Form, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002.

The same analysis was used to examine the proportion of workers working in a healthcare job prior to and after training. Results (Figure 2) show that the largest increase is for the CNA/HHA training group, of whom 7.6% are working in health care prior to training, compared with 52% after training. It seems that this group, compared with the other groups, has a more predominant downward trend during the last two quarters. The LVN/RN group starts higher than the others, with one-quarter initially working in health care, and moves up gradually, to 41% in health care. It would be useful to have longer-term findings to examine turnover rates, because the post-training period we analyze is too short to discern real trends.

**Figure 2. Quarterly Healthcare Employment Status for CTI Participants by Training Type based on Exit Date**



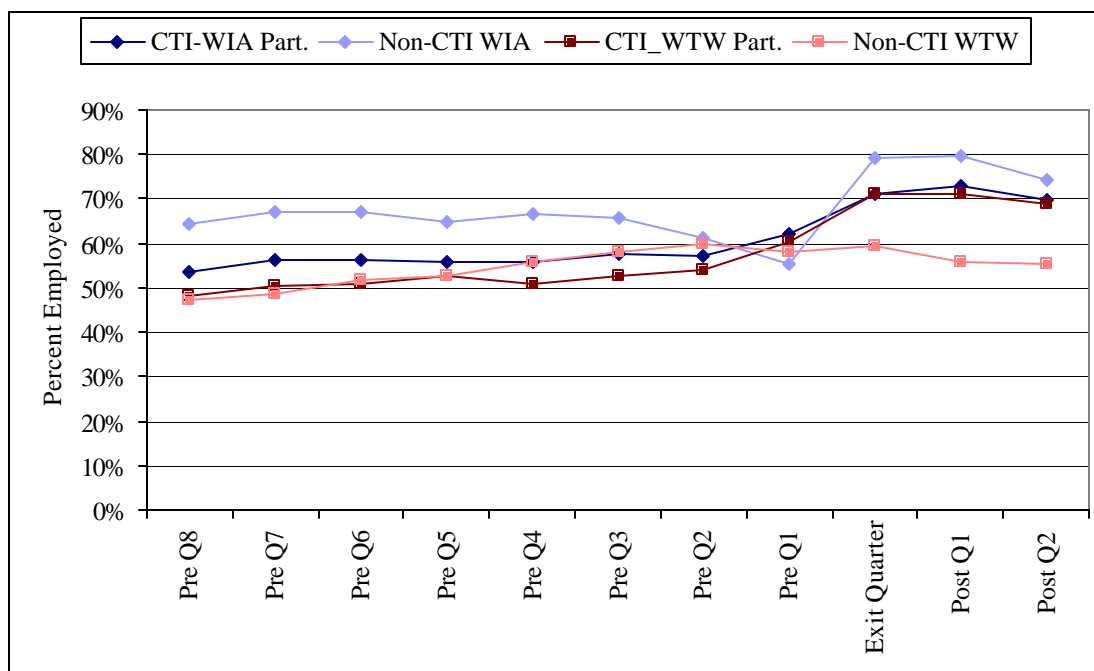
Source: CTI Baseline Information Form, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002.

### ***Comparing employment retention of CTI trainees with other WIA/WtW trainees***

*Employment rates rise for the CTI groups, and healthcare employment is substantially higher for CTI than for other WIA/WtW trainees.* Using the comparison groups established earlier for WIA/WtW participants, we examine work trajectories for the CTI participants and their comparison groups. The bases for comparisons are 1,825 CTI-WIA participants, 1,222 non-CTI WIA, 878 CTI-WtW participants, and 2,529 non-CTI WtW participants. These numbers are large enough to allow meaningful analyses. Regarding general employment following program exit (Figure 3 below), for all groups there is a small upward rise in employment. The non-CTI WtW group has the lowest employment rate, with 48% employed pre-training and 55% employed post-training. The WtW CTI group rate increased from 48% to 69%, a substantial increase.

Interestingly, the non-CTI WIA group exhibits a somewhat different pre-exit employment pattern than the other groups. There are higher employment rates early on and a significant decrease in employment rates just prior to exit (or during program participation), followed by a more dramatic increase in employment upon exit. This suggests that the employment and training context for this group may be different than that of the other groups.

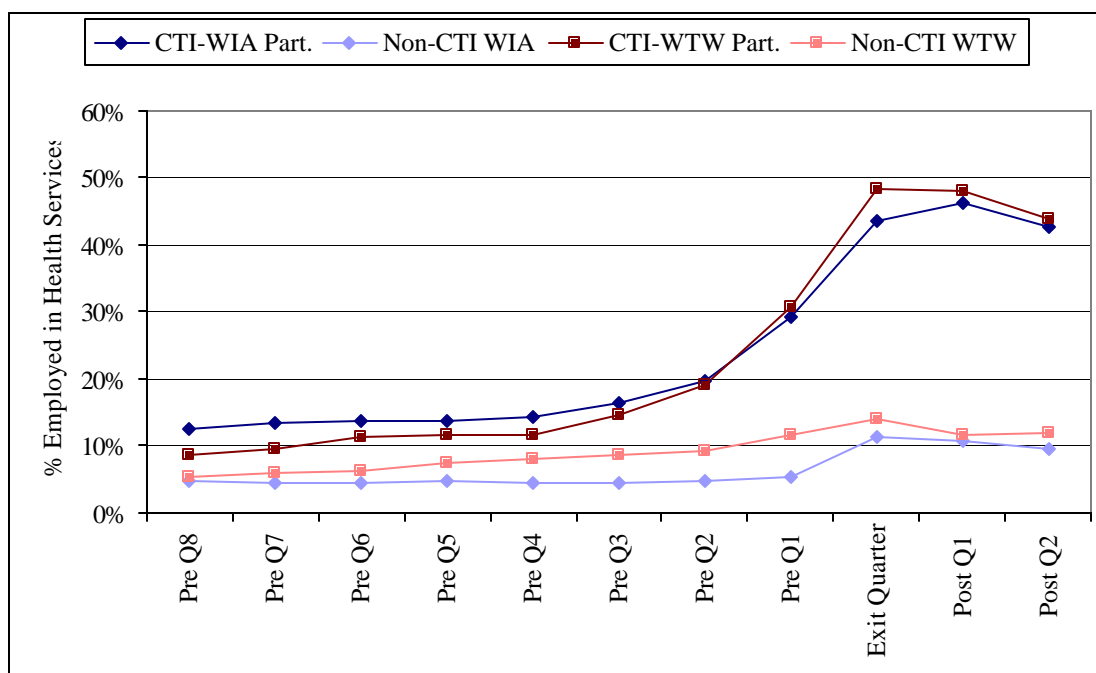
**Figure 3. Quarterly Employment Status for CTI Participants and WIA/WtW Comparison Groups based on WIA Exit Date.**



Source: WIA and WtW enrollment data, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002.

Regarding healthcare employment (Figure 4), CTI participants had higher (43- 44%) healthcare employment rates, compared with the non-CTI group rates, that hovered around 10% in healthcare following WIA training. This is not unexpected, since CTI training focused solely on health care whereas the comparison groups received more general training. It does, however, confirm the focused healthcare impact of CTI. Interestingly, WIA trainees overall did not fare any better than WtW trainees overall.

**Figure 4. Quarterly Healthcare Employment Status for CTI Participants and WIA/WtW Comparison Groups based on WIA Exit Date.**

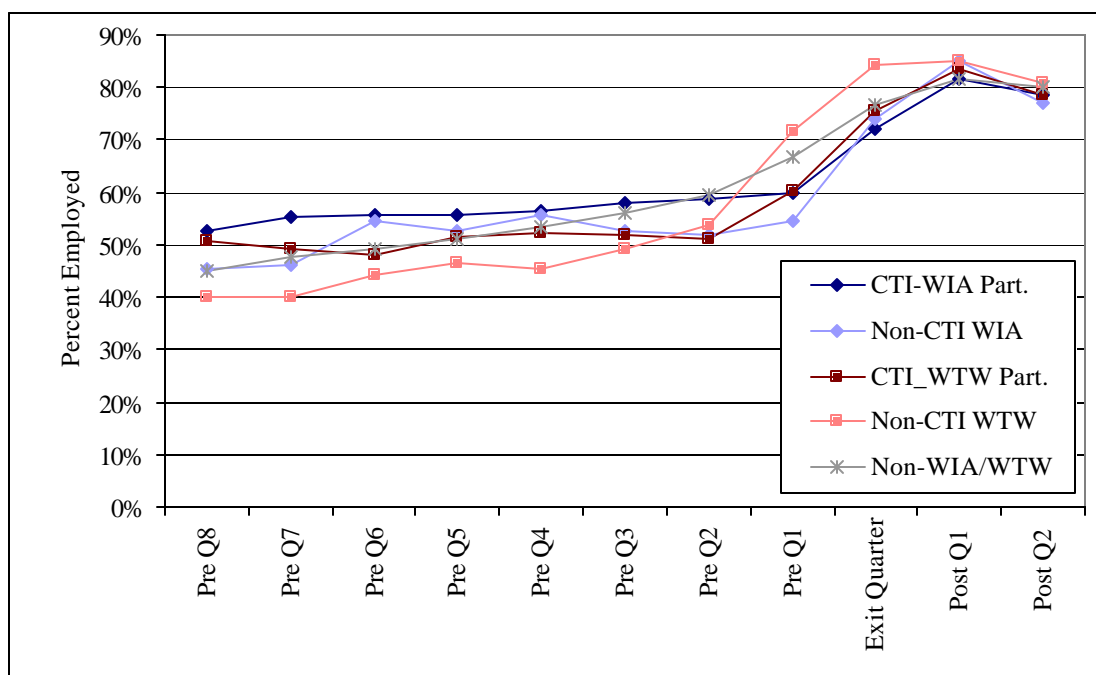


Source: WIA and WtW enrollment data, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002.

### ***Comparing CTI and non-CTI employment retention among all CNAs***

*There are no significant employment retention differences between CTI and non-CTI trainees in the CNA population.* Here we analyze data from newly certified CNAs, compared those who were and were not in the CTI program, within WIA and Welfare-to-Work subgroups. This comparison is important because it focuses on health care workers only, specifically CNAs, whereas the other comparison groups include all occupations. The largest group of CNAs is that with no WIA/WtW affiliation, or non-WIA/WtW, numbering 31,906. The CTI groups number 1,196 for WIA and 576 for WtW. The remaining two groups are 108 (non-CTI WIA) and 731 (non-CTI WtW). Findings show little difference among the five groups for general employment (Figure 5), with about 80% employed post-training.

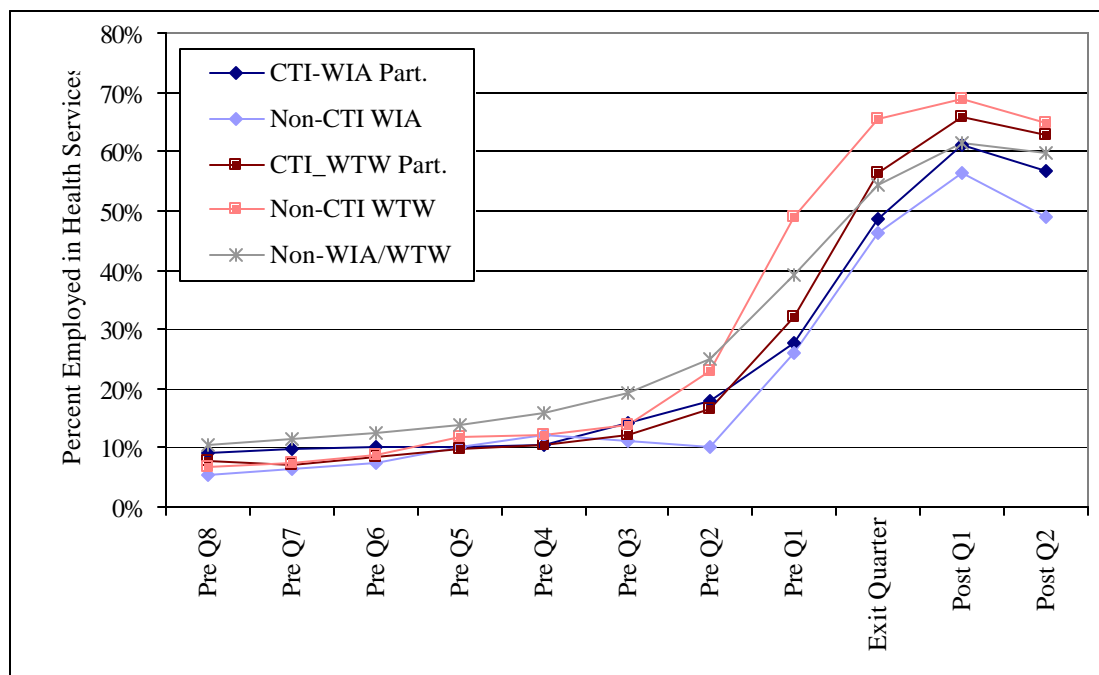
**Figure 5. Quarterly Employment Status for Newly Certified CNAs by Program Participation based on CNA Certification Date**



Source: WIA and WtW enrollment data, 2001-2002; CNA Registry Files, DHS, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002.

For healthcare employment (Figure 6), the five CNA groups were similar prior to certification, with post-certification employment showing, for the WIA groups, that CTI participants were not significantly more likely to be working in healthcare (57% versus 49%). For the WtW groups, there was even less difference (63% versus 65%).

**Figure 6. Status of Quarterly Employment in Healthcare for Newly Certified CNAs by Program Participation based on CNA Certification Date.**



Source: WIA and WtW enrollment data, 2001-2002; CNA Registry Files, DHS, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002.

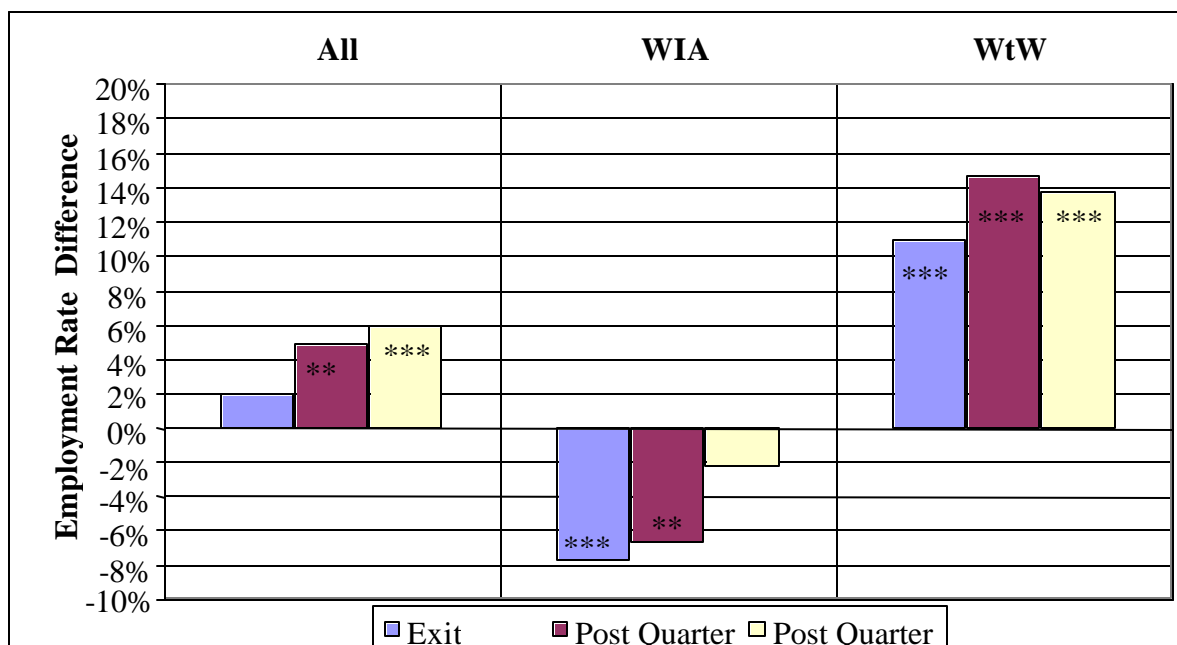
### ***Multivariate analyses, for WIA and WtW comparison groups***

*Controlling for prior differences, CTI participants, especially the WtW participants, fare better post-training than their comparison groups.* We summarized differences in employment rates for CTI participants compared with WIA/WtW comparison groups, controlling for extraneous factors. Each difference, for each group and for each period of time, is based on a separate multiple regression where multiple factors are controlled. In addition to program participation, these factors include being a program dropout, age, gender, ethnicity, education, non-citizenship, limited English, number of months on welfare, number of quarters employed before training, and regional unemployment rate. For the second regression predicting healthcare employment, the control variables are the same with the addition of employment in the health services industry during the fourth quarter before program exit. Findings from these regressions are based on 1,775 CTI-WIA participants, 779 CTI WtW participants, 1,128 non-CTI WIA trainees, and 2,098 non-CTI WtW trainees. For a more detailed description of these predictor variables, see Table 54-F in Appendix F.

CTI participants fared better in post-training general employment than the non-CTI participants, with 6% higher employment rates at the second quarter after training (Figure 7). When findings are separated by WIA and WtW groupings, it is apparent that the increase in employment is due to the WtW group. For the WtW group, CTI trainees had 13.7% higher employment rates at post-training quarter 2 than the non-CTI trainees. For the WIA-only group, CTI participants had about 2% lower employment rates than non-CTI participants, not a significant difference.



**Figure 7. How Much Better, or Worse, are Employment Rates for CTI Participants, compared with Comparison Groups, Controlling for Demographic Variation?**

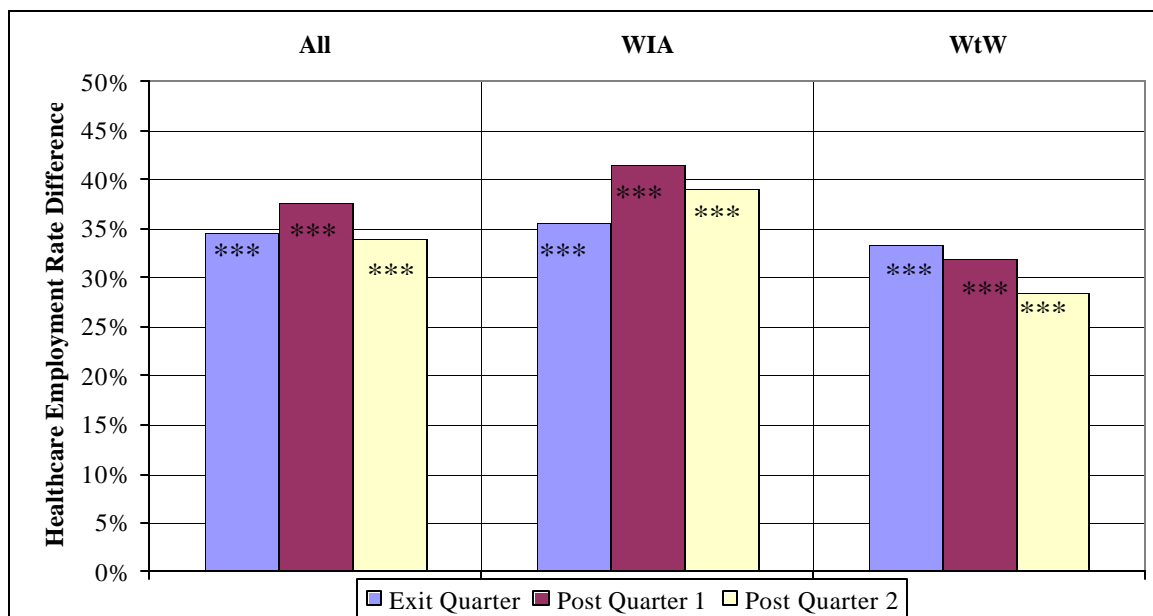


Source: WIA and WtW enrollment data, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002; MEDS, DHS, 1987-2001.

\*p<.05; \*\*p<.01m \*\*\*p<.001

As depicted by the graph below (Figure 8), CTI trainees had much higher employment rates in health care, as expected. For each of the periods, and for each group, CTI trainees were more apt to be employed in health care. The differences were significant for each of the nine comparisons. Over time, the relatively higher rates of employment dropped for the WtW group, but we cannot say, given the limited time frame, whether or not this is a trend.

**Figure 8. How Much Better, or Worse, are Healthcare Employment Rates for CTI Participants, versus Comparison Groups, Controlling for Demographic Characteristics?**



Source: WIA and WtW enrollment data, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002; MEDS, DHS, 1987-2001.

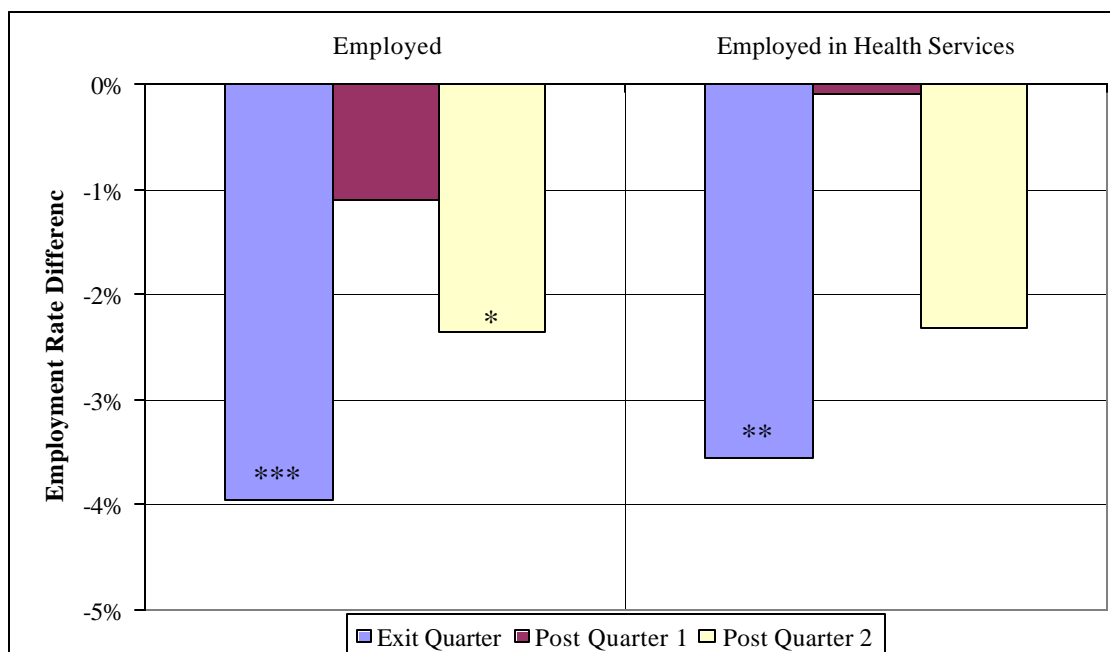
\*p<.05; \*\*p<.01m \*\*\*p<.001

### ***Multivariate analysis, for CNAs only, comparing CTI and non-CTI***

*Compared with all other CNAs, the CTI group has slightly lower employment, but little difference in healthcare employment, at two quarters post-training.* We analyzed employment rates for recently-certified CNAs only, and compared the CTI CNA group (N=1,593) with other CNAs (N=27,175) by using logistic regressions to predict employment, employment in health services, and earnings. Each comparison, for each period of time is based on a separate regression controlling for multiple variables. These comparisons are similar to those above, except (1) they include only CNAs who are identified by the state CNA certification database, (2) they use fewer predictor variables, and (3) the exit quarter refers to date of certification. Variables include age, gender, welfare history, employment history, and regional unemployment rate for the county, in addition to program participation. A more detailed description of the predictor variables is in Table 54-F, Appendix F.

There is little difference between the CTI CNAs and the non-WIA/WtW newly-certified CNAs for general employment levels (Figure 9 below). The CTI CNAs, when controlling for other variables, show significantly lower rates of employment and of health care employment immediately after certification, but these differences dissipate over time. General employment post-quarter 2, shows a 2.4% difference, which is statistically significant, but small, practically speaking, and the difference in health care retention is not significant. All things being equal, the CTI CNAs fared as well as the non-WIA/WtW CNAs in terms of retention in health care work.

**Figure 9. How Much Better, or Worse, are Employment Rates for CTI CNAs, than Non-WIA/WtW CNAs, Controlling for Demographic Characteristics?**



Source: WIA and WtW enrollment data, 2001-2002; CNA Registry Files, DHS, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002; MEDS, DHS, 1987-2001.

\* $p < .05$ ; \*\* $p < .01$  \*\*\* $p < .001$

### ***Factors related to retention within the CTI training group***

*Significant predictors of retention for both general and healthcare employment were completing the CTI program, and being a non-citizen; CNA training and prior healthcare work were other predictors of healthcare employment.* We used multiple regressions to determine which factors are significant predictors of retention in general employment, and in healthcare employment (See Tables 54-F and 55-F, Appendix F). Retention is defined as employment during the second quarter after WIA program exit. Predictor variables include program dropout, WtW participation, type of training, type of recruitment into CTI, age, gender, ethnicity, education, marital status, regularly caring for someone else, non-citizenship, English proficiency, owning a car, number of quarters employed before training, and number of months on welfare. (Table 53-F, Appendix F, has full descriptions of these variables).

*Predicting retention in general workforce.* The results of the first regression (Table 54-F, Appendix F) describe, among CTI participants, which variables predict whether or not a participant will be employed during the second quarter after program exit. The strongest predictors are: not being a program dropout, having prior employment, being a non-citizen and caring for someone else. Someone who dropped out of the program is about 24% less likely than a non-dropout to be working after six months. If participants worked during 1999 and 2000, they are 3% more likely to be employed for each quarter worked, so that if they worked, say, all eight quarters, they would be 24% more likely to be employed. If they are a non-citizen, they are 13% more likely to be employed, and if they regularly cared for someone prior to the program they are 7% more likely to be employed.

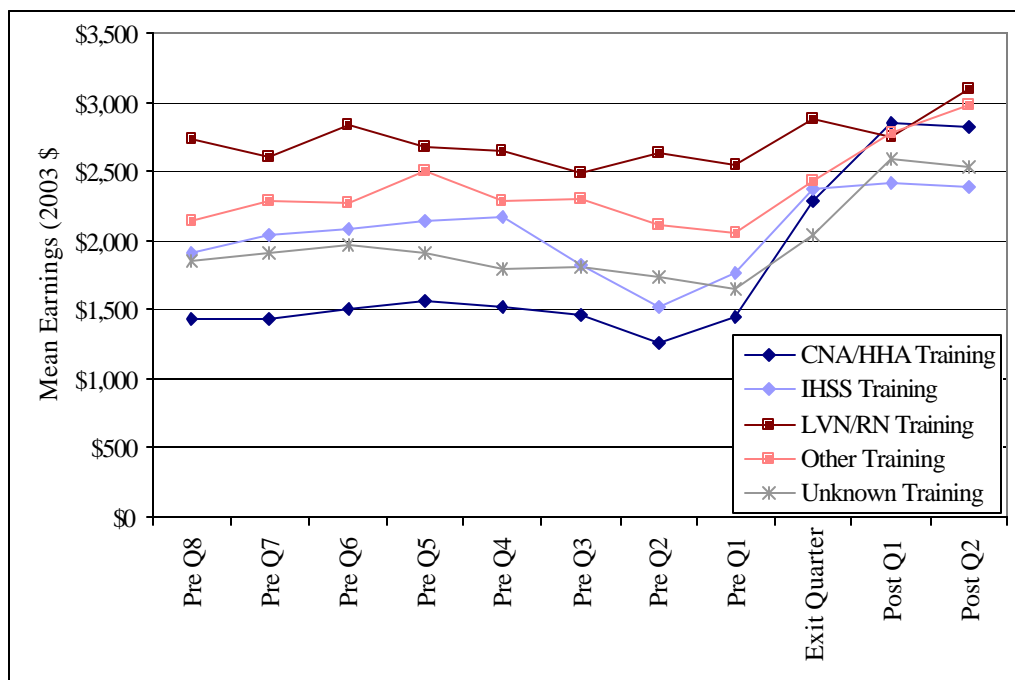
*Predicting retention in health care workforce.* Table 55-F (Appendix F) shows regression results for predicting placement in health services during the second quarter after program exit. Not being a program dropout, being in the CNA training program, being a non-citizen, and prior work in health care are significant predictors. To a lesser degree, age and the regional unemployment rate also play roles. Program dropouts are 43% less likely than non-dropouts to be working in health care. Those with prior employment in health care were 31% more likely to be retained. CNA trainees, compared with the other training program trainees, are 18% more likely to be working in health care. And, non-citizens, compared with citizens, are 17% more likely to be health care workers.

## Career ladder mobility and earnings

### *Earnings by type of CTI training*

*Earnings levels are a useful proxy for career ladder mobility, and interestingly, CNAs showed the largest increase in earnings.*<sup>6</sup> While all groups increased earnings between pre- and post-training, the largest increase was for the CNA group, whose mean quarterly earnings doubled, from \$1,433 eight quarters before program exit to \$2,818 two quarters after program exit (Figure 10 below). The smallest increases were for the IHSS group, whose earnings rose by \$480. The LVN/RN group's average quarterly earnings increased by \$369. This information would be more informative if it were collected for a longer follow-up time period.

**Figure 10. Comparison of Earnings over Time, by Type of Training**



Source: WIA and WtW enrollment data, 2001-2002; CTI Baseline Information Form follow-up, 2001-2002; Quarterly Base Wage/ES -202 files, EDD, 1998-2002.

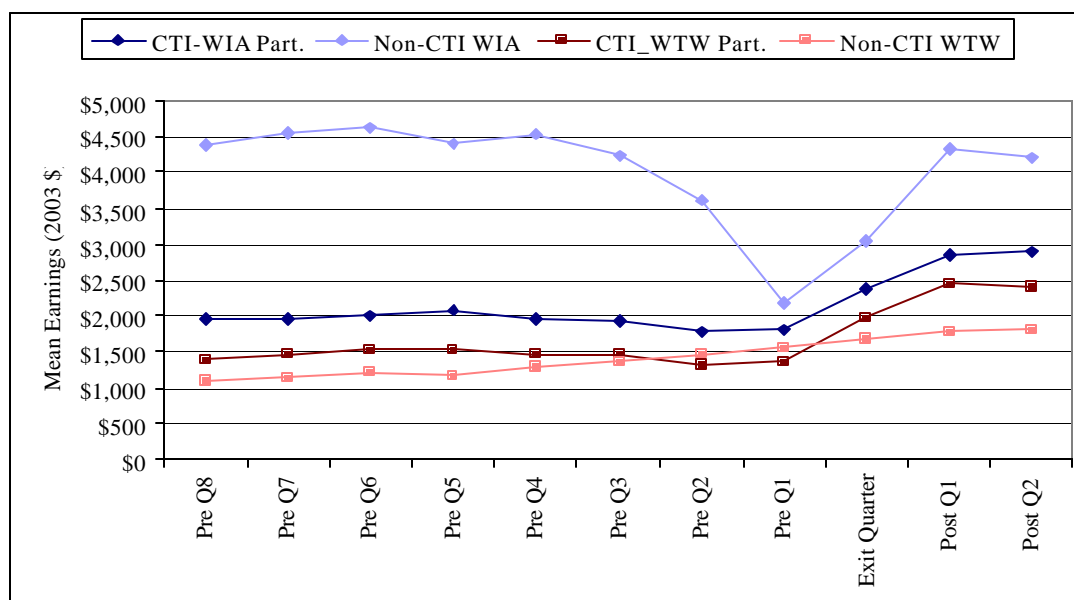
Note: Earnings calculations include individuals with no earnings.

<sup>6</sup> Earnings were calculated from EDD Base Wage data, and all tabulations reported here include zero-value observations.

### *Comparing earnings of CTI trainees with other WIA/WtW comparison group trainees*

For both CTI groups post-program earnings are significantly higher than pre-program earnings, suggesting upward career mobility. Here again, we use the WIA/WtW comparison groups to determine the impact of the CTI training on earnings (Figure 11). As with the employment rate patterns, the non-CTI WIA group exhibits a somewhat different pre-exit pattern than the other groups. There are higher mean quarterly earnings early on and a significant decrease in earnings just prior to exit (or during program participation), followed by a more dramatic increase in earnings upon exit. This suggests that the employment and training context for this group may be different than that of the other groups. Program participation for the non-CTI WIA group does not appear to raise post-exit earnings above earnings levels a year before program exit, suggesting that the non-CTI WIA group is not moving up the career ladder. For WIA, CTI earnings increased by \$953 (49%) from the eighth quarter before program exit to the second quarter after program exit, compared with the non-CTI group decline of \$189 (-4%). For WtW, the CTI group earnings increased by \$1,004 (72%), compared with \$717 (65%) for the non-CTI group. While these are impressive gains for the CTI groups, the comparison group differences do not take into account other variations among the groups. The next section will examine changes in earnings, taking into account these variations.

**Figure 11. Mean Earnings over Time, for CTI Participants, and Comparison Groups**



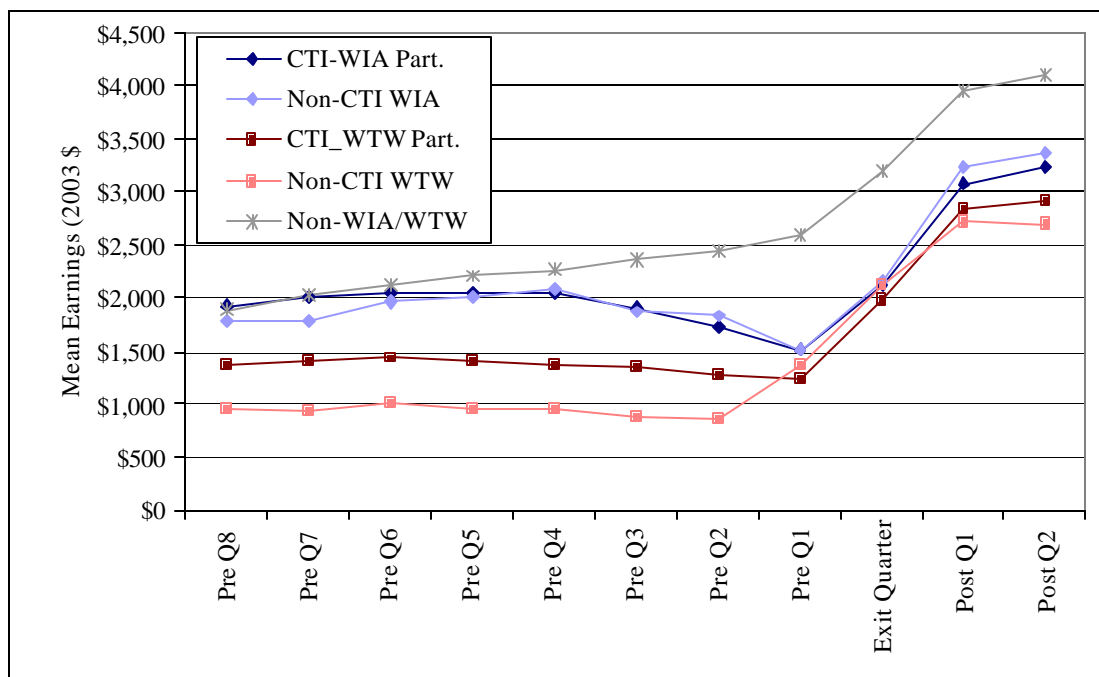
Source: WIA and WtW enrollment data, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002.

Note: Earnings calculations include individuals with no earnings.

### ***Mean earnings over time for all CNAs --comparing CTI and non-CTI***

*Analysis of earnings for newly-certified CNAs shows significant increases for all groups, but the non-WIA/WtW CNAs have the highest post-training earnings (Figure 12). The starting mean earnings are lower for both WtW groups, and the gains for the four groups are similar, with somewhat greater gains for the WtW groups. For earnings patterns within the WIA CNA group, the CTI and non-CTI groups are similar, but for earning patterns within the larger WIA group (Figure 11), the CTI and non-CTI groups are dramatically different.*

**Figure 12. Mean Earnings Over Time for Newly Certified CNAs, by Type of Training**



Source: WIA and WtW enrollment data, 2001-2002; CNA Registry Files, DHS, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002.

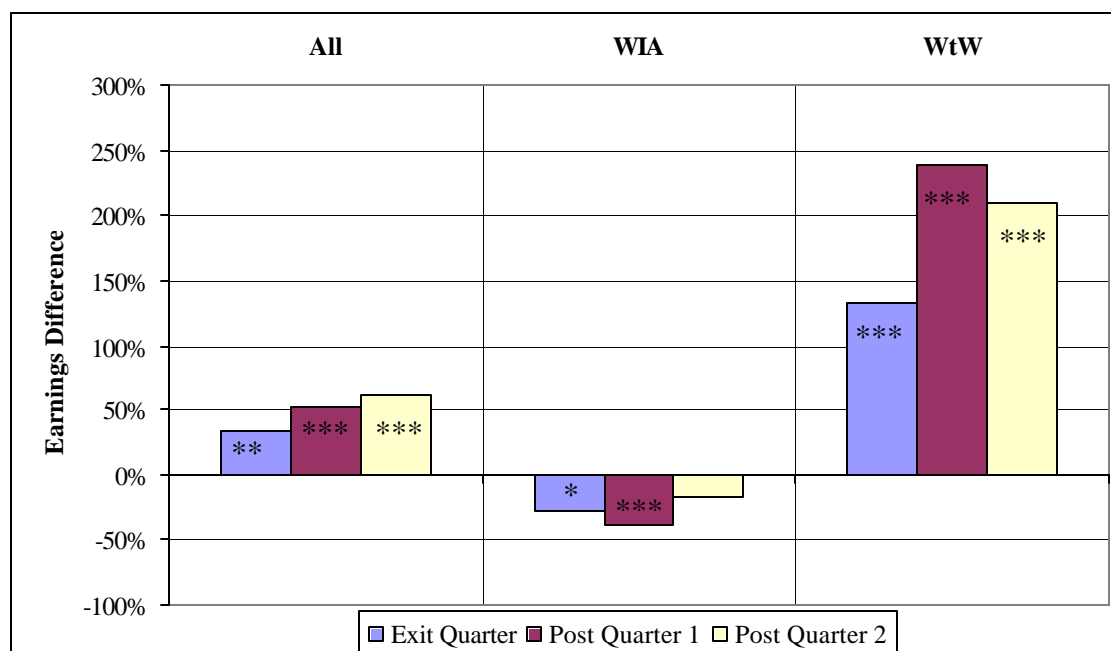
Note: Earnings calculations include individuals with no earnings.

### ***Multivariate analyses, to predict differences in earnings --CTI and comparison group***

*Controlling for prior differences, the CTI WtW participants (and CTI participants as a whole) have substantially better earnings post-employment. In Figure 13 below, each CTI and non-CTI earnings difference, by group (WIA and WtW together, WIA and WtW), and by period of time is based on a separate log-linear logistic regression where multiple variables are controlled. The predictor variables used here are similar to those used in the earlier regressions predicting employment. In addition to program participation, these variables include being a program dropout, age, gender, ethnicity, education, non-citizenship, limited English, number of months on welfare, earnings in the fourth quarter prior to program exit, and the regional unemployment rate.*

When these variables are held constant, CTI participants overall have 61% higher earnings by the second quarter than the comparison group of WIA/WtW trainees (Figure 13 below). When WIA CTI-participants are compared with WIA non-CTI participants, earnings at the second post-training quarter are 18% less for CTI participants, all other things being equal. The picture is dramatically different for the WtW group. For this group, at the second quarter after program exit, the CTI participants' earnings were 210% higher than the non-CTI group. It is apparent that career ladder movement is most positive for WtW CTI participants.

**Figure 13. Percentage Differences in Earnings between CTI Participants and Comparison Groups**



Source: WIA and WtW enrollment data, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002; MEDS, DHS, 1987-2001.

\*p<.05; \*\*p<.01m \*\*\*p<.001

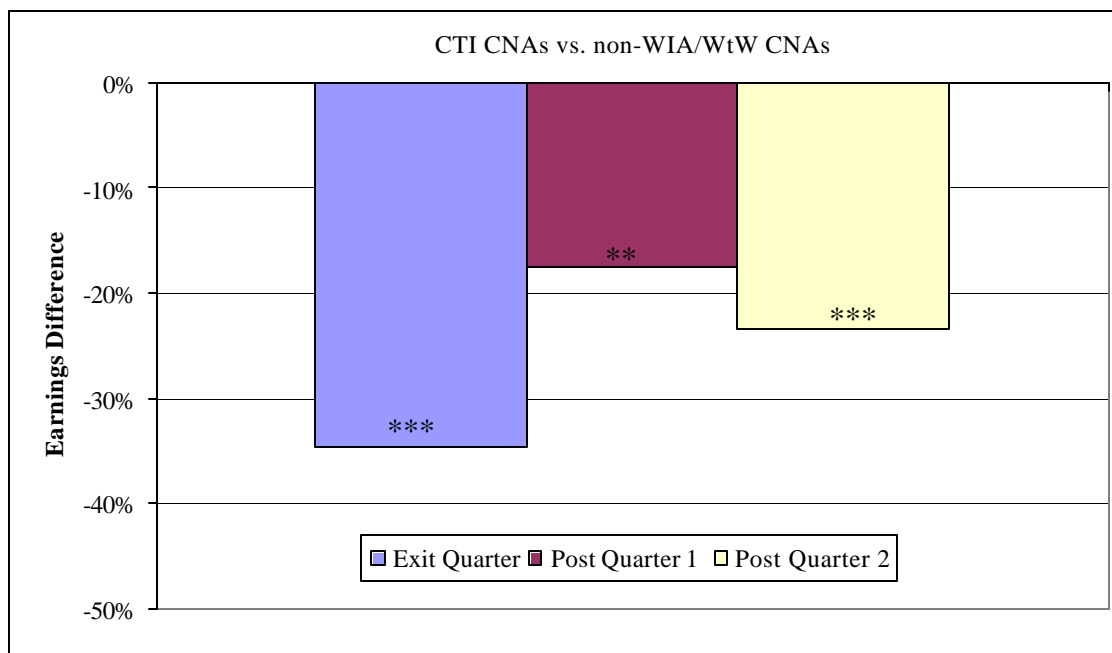
### ***Multivariate analyses, to predict differences in earnings--CNAs only***

*CTI participants becoming CNAs earn less than non-CTI CNAs.* We conducted the same type of multivariate analyses using only data from those who were newly-certified CNAs, to determine, controlling for a number of variables, differences in earnings between the CTI and the non-CTI, non-WIA/WtW CNAs. We compare the CTI CNA group (N=1,524) with the non-WIA/WtW CNAs (N=29,393) by using log-linear regressions to predict earnings. Each comparison, for each period of time based on the date of CNA certification, is based on a separate regression controlling for multiple variables. These comparisons include only CNAs who are identified by the State CNA certification database, and use predictor variables that include age, gender, welfare history, employment history, and regional unemployment rate for the county, in addition to program participation.



The results (Figure 14) suggest that CTI participants becoming CNAs earn less than non-CTI CNAs. In the quarter of certification (exit quarter), the CTI CNAs make almost 35% less than the other CNAs (holding other variables constant). By the second quarter post-certification, the CTI CNAs make 23% less than their non-CTI colleagues. This reflects, in part, somewhat lower employment rates for these CNAs two quarters after certification, but that is only a partial explanation. Other explanations may be related to the fact that the CTI CNAs, many of whom are WtW participants, have more barriers to employment that affect their earnings, or, they may be less willing or able to move to higher-paying jobs

**Figure 14. Percentage Differences in Earnings for CNAs--Comparing CTI and non-CTI**



Source: WIA and WtW enrollment data, 2001-2002; CNA Registry Files, DHS, 2001-2002; Quarterly Base Wage/ES-202 files, EDD, 1998-2002; MEDS, DHS, 1987-2001.

\*p<.05; \*\*p<.01m \*\*\*p<.001

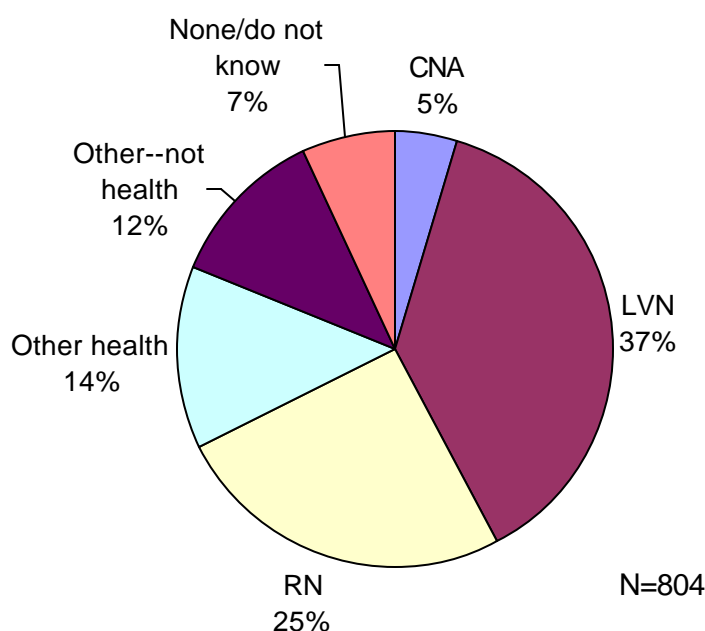
### ***Future Goals--Self-Reports***

*At least three of four CTI trainees are seriously interested in health care careers, and are thinking in terms of career ladders.* In the training satisfaction questionnaires, we asked participants about future goals after CTI training. Based on 804 responses, over 60% stated that they wanted to become nurses (Figure 15 below). Over 37% indicated they wanted to be an LVN, 25% an RN, and 14% indicated other health careers, such as psychiatric technician or respiratory therapist. Fewer than 12% indicated a non-health care career choice, and 7% had “do not know” or “none.”

We were particularly interested in the CNAs who responded to this question, so we analyzed separately 410 surveys from CNA trainees only. This addresses the question of whether CNA trainees are good targets for career ladder training. For this group, over half (56%) wanted to become an LVN or an RN; over three-quarters wanted further training in a healthcare career. We conclude that this is an excellent group to target for further training.

These data are more impressive in light of responses to the recent survey of 30,000 California CNAs. One survey question was, “If you were to change jobs, what would you do/where would you work?” The CNAs could choose two answers, and all together 62% said they would return to school to further their education (although it is unclear whether they would stay in healthcare). From that group, 16% also chose as their other response, “return to school to train in a new field,” indicating that they would probably not remain in healthcare. Loosely extrapolating, less than half would continue an education in health care. Although this is a weak comparison because the questions are worded very differently, it indicates that the CTI group is highly motivated, and very interested in both healthcare and moving up the career ladder.

**Figure 15. What Are the Goals of the CTI Participants?**



Source: CTI Training Satisfaction Survey, 2001-2002.

To summarize individual-level successes, we first must qualify all findings by stating that without a true control group, we cannot make many claims with complete certainty. Also, a longer follow-up period is necessary to substantiate claims about retention and career mobility. However, it appears that for now, there are some positive outcomes for participants.

- Regarding retention in the general workforce, CTI participants as a whole, and particularly WtW participants, were employed at higher levels than the other WIA/WtW trainees.
- Regarding retention in the healthcare workforce, CTI participants seem to be stable during the first two quarters after WIA exit, although the CTI-WtW group shows some decline (when compared to the non-CTI WtW comparison group).
- Earnings for all CTI participants are higher than for the WIA/WtW comparison groups.
- Earnings for the WtW CTI participants are substantially higher than for the WtW comparison group.

- For the group of CNAs only, CTI participants fare better in terms of employment and earnings at first, but this advantage disappears over time, and becomes even worse for earnings, where CTI CNAs earn significantly less than the non-CTI, non-WIA/WtW CNAs after the second quarter following certification.
- For CTI participants only, not dropping out of the CTI program, being in CNA training, being a non-citizen, and having prior employment in health services are all associated with higher retention in healthcare.
- Over 80% of CTI participants self report plans to move up the healthcare career ladder.

## **C. HOW SUCCESSFUL WAS CTI AT THE EMPLOYER LEVEL?**

### **Summary of findings from the employer survey**

*Based on a survey of twenty employers who hired graduates of the CTI-funded training programs, there were several interesting findings.* In-depth survey findings are reported in Appendix B of this report. Not all employers we interviewed were aware of the CTI program, nor were they not aware of which employees participated in the program. Thus they were not able to comment on participant qualifications. Among those few who were knowledgeable, comments overall were positive.

Responses were disparate. When we asked about employee incentives, some employers offered many opportunities for employees, whereas others offered virtually no incentives. Training opportunities ranged from the minimum required (e.g., nursing homes offering continuing education courses) to strong support and encouragement in the form of tuition reimbursements. In part, these disparities were due to the range in size and makeup of employers interviewed. A large teaching hospital will have different approaches to and more resources for its employees than a small nursing home or homecare agency, for example.

Employers' perceptions about the worker shortage were also disparate. Employers were evenly divided between those who felt that the healthcare worker shortage was better or worse than a year ago, and also evenly divided over their projections for the future. In terms of finding workers, most of the employers did not seem to have a lot of difficulty hiring CNAs; rather, the problem seemed to be finding well-qualified CNAs, and keeping them on the job. Almost all agreed that the shortage of RNs, and to a lesser extent, LVNs, was quite serious. One area of agreement among several home care agencies was that home care workers have low turnover. One respondent stated, "Most people go into home health and stay forever. The home health aides currently upgrading their training aren't doing so to leave home health, but to respond to regulatory changes regarding staff mix and training."

### ***Welfare-to-Work employees***

The interview included questions regarding Welfare-to-Work employees. Most employers were happy to hire WtW clients, and were often happy with the quality of work. However, most agreed that many WtW clients came with "a lot of baggage," that they had problems with childcare and with transportation, and that they could benefit from more training in areas such as soft skill development. The tone of these comments was not judgmental or even

negative (with one exception). In half the cases they did not know who were and who were not WtW clients. For the remainder, the feeling seemed to be that some WtW workers could and would succeed and others would not, due to personal problems that employers could not change or control. The employers were very understanding of the issues, and sympathetic with the dilemmas that were raised. However, they did not bend the rules for these workers. When, for example, a mother had to miss work for several days to care for a sick child, the worker was fired once the missed days exceeded those allowed by the employer.

When asked their perceptions about why people stay on or leave the job, employers stated they had no way of knowing where people went when they quit, or were fired, or why they quit. In some cases it was assumed that CNAs would, for example, leave nursing homes and go to hospitals where the salaries are higher, but this was not substantiated. It is interesting that in an area where retention is such a big issue, employers do not know why employees quit.

### ***Tax incentives to hire Welfare-to-Work clients***

*Few employers saw the advantage of, or used, tax incentives.* Fifteen of twenty were aware of their existence, but only three said they used them. One employer who used them seemed to like receiving the tax credits. They call every employee to see if they qualify. Another who used them had mixed feelings; it was difficult determining eligibility on the phone, but now it is done with paperwork. It's "good for the company."

One stated, "We would like to use tax incentives, but we don't have the personnel to follow up and learn about all of the different programs, so we don't know if we could use them or not." The primary reason given for not using them was that they are not available to non-profit institutions, only to for-profits. Another barrier mentioned was that obtaining these kinds of tax incentives required a large amount of paperwork, and that this was not at all cost-effective for the smaller businesses, but only for the large-scale corporate homes and agencies.

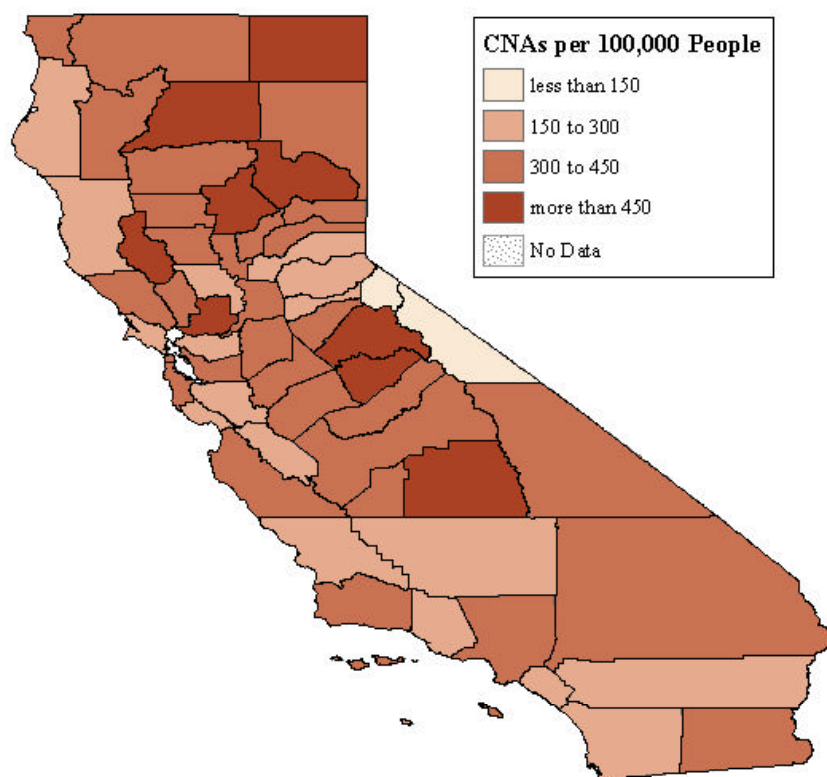
To summarize the employer survey findings, most employers did not seem to have trouble hiring CNAs, but had much difficulty hiring RNs and LVNs. Although retention is a serious problem, employers usually did not know why employees left. Most of the employers thought that WtW workers were good at their jobs, but had more problems with childcare and transportation. Furthermore, the employers did not make accommodations for these barriers.

## D. HOW SUCCESSFUL WAS CTI AT THE REGIONAL AND STATE LEVELS?

### Were regional shortages addressed?

*It appears that regional shortages of CNAs were addressed somewhat with the CTI program.* The map of California (Figure 16) shows the distribution of CNAs in 2001, at CTI's onset. The lowest proportions of CNAs are in both urban (Orange and San Diego) and rural (Mono, Alpine, Kern, and San Luis Obispo) counties, and are in both northern and southern parts of the State. There are no noticeable patterns of distribution.

**Figure 16. Geographic Distribution of Certified Nurse Assistants, 2001**



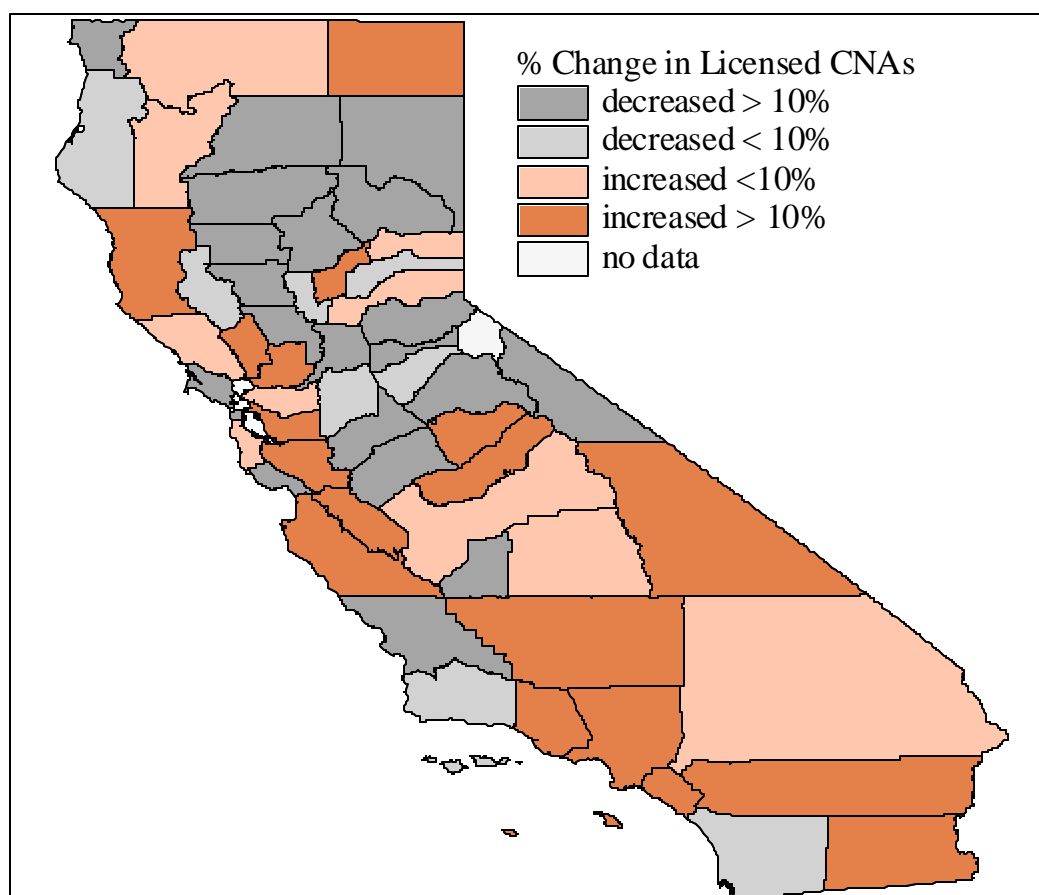
Source: CNA Registry Files, Department of Health Services, 2001 and 2000 Census.

Note: Statewide average=317.

Figure 17 below is a map of California counties, indicating changes in the numbers of CNAs who were newly certified, from 1999/2000 (before CTI) to 2001/2002 (during CTI). Although no clear patterns emerge, Southern California and the Bay Area (except for San Francisco) appear to have increases in certification. These areas had active CTI programs. In the Central Coast, Santa Barbara and San Luis Obispo Counties, without CTI programs, show decreases. Kern County had a less than average number of CNAs in 2001, and shows increases of over 10%.

**Figure 17. Percent Change in Newly Certified CNAs, from '99-'00 to '01-'02**

Percent Change in the Number of Newly Licensed CNAs/HHAs, 1999/2000 to 2001/2002



Source: CNA Registry Files, DHS, 1999-2002.

Note: Statewide average=4.4%. Percent change represents the change from 1999 and 2000 total to the 2001 and 2002 total.

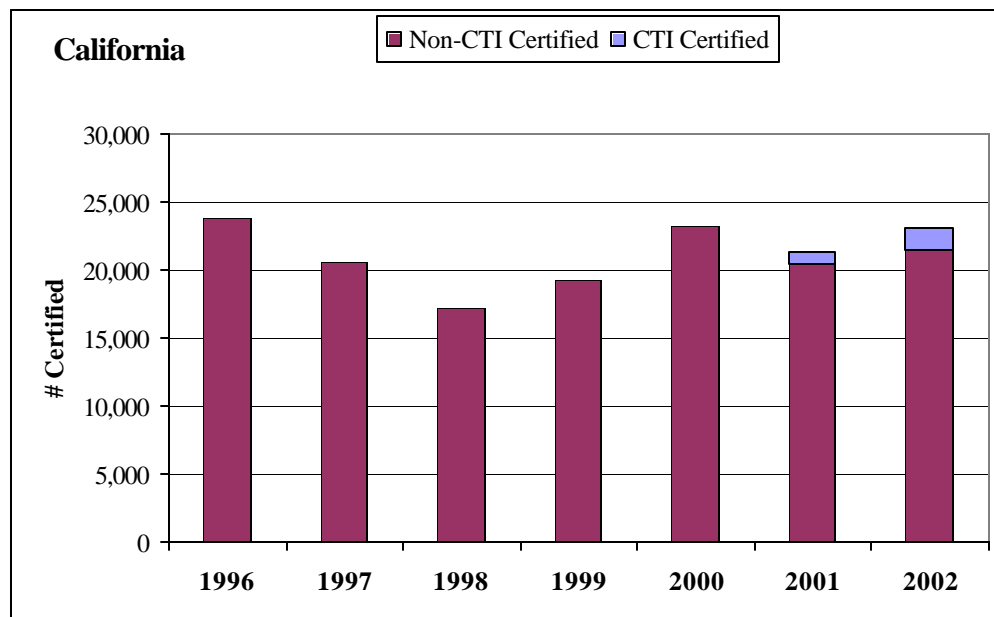
### **Are the numbers of CNAs higher for the State, or for CTI regions?**

#### ***Proportions of CNAs due to CTI***

*Statewide data on the numbers of CNAs certified since 1996 shows that CTI had a small impact statewide, and perhaps some slight regional impacts.* For the year 2000, prior to CTI implementation, 23,216 individuals received CNA certificates (see Figure 18 below). In the following year, that number decreased to 21,259, with 795 of the certificates in the CTI training

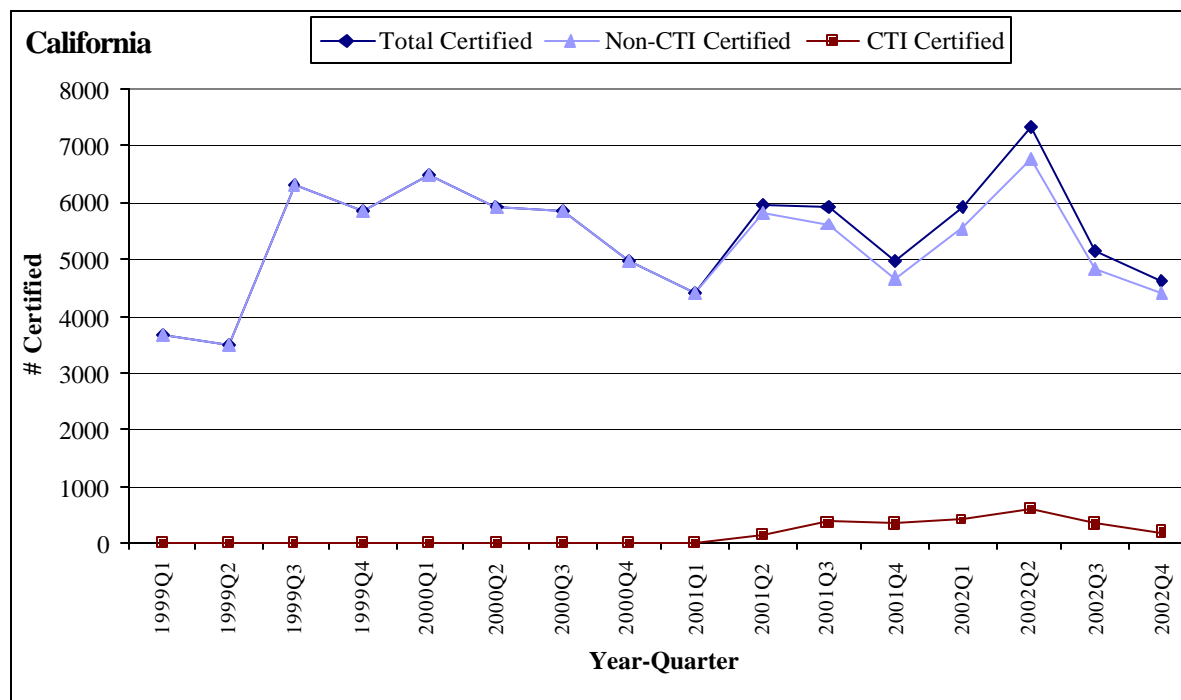
program. In 2002, the number increased to 23,029, an increase that might be attributable in some part to 1,489 CTI program CNAs. Figure 19 shows the overall impact of CTI on CNA certificate issue, by quarter.

**Figure 18. Numbers of CNA Certificates Issued, by Year, in California**



Source: WIA and WtW enrollment data, 2001-2002; CNA Registry Files, DHS, 1996-2002.

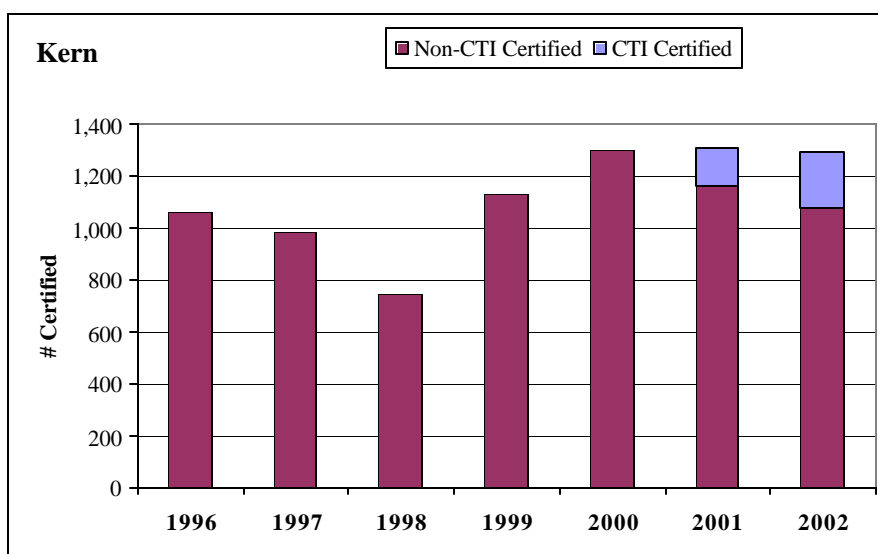
**Figure 19. CTI and non-CTI CNA Certificates Issued, by Quarter, in California**



Source: WIA and WtW enrollment data, 2001-2002; CNA Registry Files, DHS, 1996-2002.

We conducted similar analyses of CNA certification for each of the collaboratives. Three collaborative's charts -- Kern, Sacramento, and San Diego -- are displayed below. The collaboratives were selected because they had larger CNA populations and they were fairly representative of the other nine sites. In general, most collaboratives follow the state's patterns. For Kern, the annual rates of CNA certificates hold the pre-CTI numbers constant, at a level higher than most of the earlier years. (Figure 20).

**Figure 20. Numbers of CNA Certificates Issued Annually, Kern**

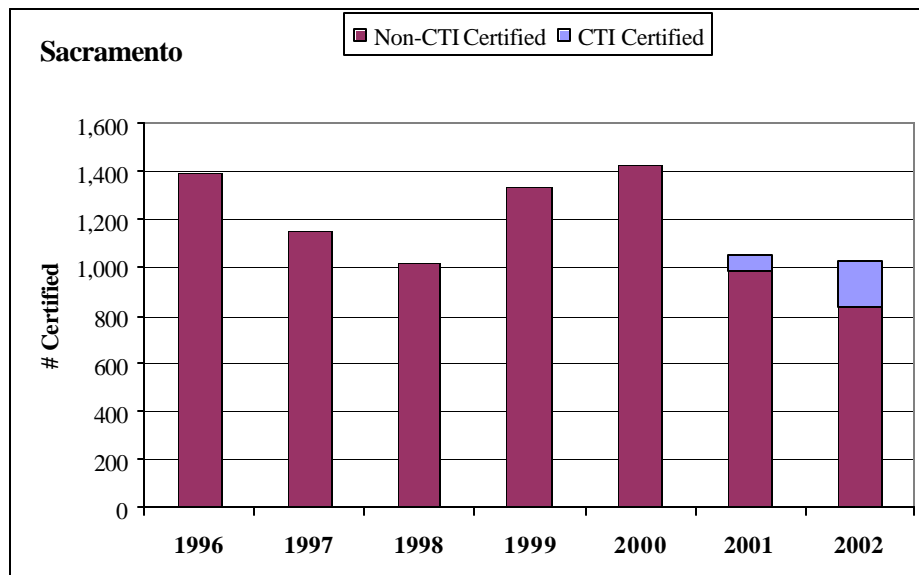


Source: WIA and WtW enrollment data, 2001-2002; CNA Registry Files, DHS, 1996-2002.

The rates for the Sacramento collaborative are different, with pre-CTI numbers of certified CNAs higher than numbers during the CTI period, even including the CTI CNAs. Here a downward trend is indicated, alleviated only partially by CTI in 2002 (Figure 21).



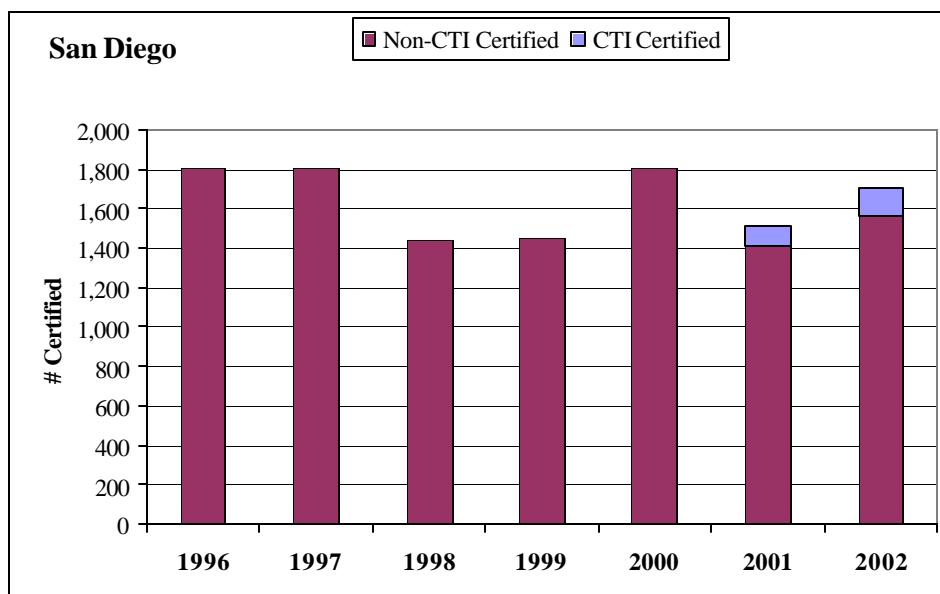
**Figure 21. Numbers of CNA Certificates Issued Annually, Sacramento**



Source: WIA and WtW enrollment data, 2001-2002; CNA Registry Files, DHS, 1996-2002.

San Diego (Figure 22) provides another picture of regional changes for the CNA population. In 2000, there were 1,813 CNA certificates issued, compared with 1,705 in 2002. The trend without CTI is relatively static; CTI had a small impact on the total number certified.

**Figure 22. Numbers of CNA Certificates Issued Annually, San Diego**



Source: WIA and WtW enrollment data, 2001-2002; CNA Registry Files, DHS, 1996-2002.

Based on these figures, we cannot say that the numbers of CNAs are higher for the State than would have been the case without CTI. With about 2,400 total certified through CTI over two years, it is difficult to discern a statewide impact. There were 44,000 CNAs certified during

that time and there were fluctuations over time. It appears that there were some slight regional impacts, variable across the sites, but it is not clear how much change was due to CTI and how much due to natural fluctuation.

### ***Multivariate analyses to determine degree of program substitution***

*Use of multiple regression modeling indicates that about four in ten CTI-trained CNAs would not have received training in the absence of the CTI program.* We know that some individuals may have become CNAs in the absence of the CTI program by seeking CNA training on their own, and that some CNA trainees receiving CTI support may have precluded other people from receiving CNA training by taking up limited training “slots.” Under these circumstances, the CTI program is simply substituting CTI-trained CNAs for non-CTI trained CNAs and not adding CNAs to the supply.

The true impact of CTI on the number CNAs in California is based on how many people would have become CNAs in the absence of the CTI program. Since no true control group exists and data are limited, the best way to approximate this impact is compare the number of CNAs certified across California counties and years. If CTI added to the supply of CNAs then the number of new CNAs in a given year and a given county will be higher if CTI-trained CNAs were certified in that year and county, everything else equal. If no substitution exists, for every CTI-trained CNA produced in a given year and county, the overall number of new CNAs in that year and county will increase by one. If the CTI program is substituting for other training sources, then there will not be a one-to-one relationship between the number of CTI-trained CNAs and the overall number of new CNAs in a given year and county.

Analysis of the variation in the number of CNA certificates issued across California counties and the years 1998 through 2002 suggests that about 4 out of every 10 CTI-trained CNAs were an addition to the overall supply of CNAs (or 6 out of every 10 would have become CNAs in the absence of CTI).<sup>7</sup> Therefore, of the approximately 2,300 CTI participants who became CNAs about 900 can be directly attributable to the CTI program. This is a rough estimate of the CTI program’s impact on the number of CNAs in California. It suggests that CTI did positively impact the supply of CNAs but some degree of substitution existed. We must stress that this estimate is for the impact on the short-term supply of CNAs, since it is not possible with available data to determine whether CTI-trained CNAs will have higher retention rates, move up the career ladder in health care, and/or remain in the state.

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<sup>7</sup> Our 4 in 10 estimated is based on a multiple regression model that predicts the number of CNA certificates issued in a given year and given county based on the number of CTI-trained CNAs certified in that year and county. The model controls for the number of CNA certificates issued in the previous year, the total population in the given year and county, the percent of the population age 65 or over in the given year and county, and the average unemployment rate in the given year and county. We also included dummy variables for each year (1998 through 2002, with 1998 as the omitted category) and normalized the number of CNAs certified by the total population. The point-estimate coefficient for the number of CTI-trained CNAs certified was 0.45 with a p-value of 0.03. Neither the coefficient nor the statistical significance level was very robust to different specifications in the model, however.

### ***3. Changes in infrastructure***

*Several new training programs can be attributed to the CTI.* Based on California Board of Vocational Nursing and Psychiatric Technicians website data from April 2001, there were 82 LVN training programs, with thirteen pending approval. By October 2003, there were 97 approved LVN programs, an increase of 15 programs. While the growth in the number of programs cannot be directly attributed to CTI funding, the fact that CTI funding supported more than 600 LVN students indicates that CTI may have had some impact on this increase. At least one program was directly related to work by a CTI coordinator and a local adult school principal, both of whom came from a healthcare industry background, and who first worked together on CTI. Both knew the needs of the community and of the student base, and because of the community's desperate need for nursing, the principal chose to move ahead to add an LVN program. That program was approved September 2003.

At the same time, the number of Psychiatric Technician programs increased from 11 to 13. Both new programs were initiated as part of the CTI program.

## V. FINDINGS AND RECOMMENDATIONS

### A. INNOVATIONS

If one defines an innovation as a new method, or something not used before, then for the most part, there were few innovations in this program overall. But if one defines an innovation as a “change in the way of doing things,” then there were innovations at each collaborative where approaches tried were not new to the field, but were new to the collaborative, so there was a diffusion of innovation. In the areas of recruitment and training, each collaborative strove to try approaches not previously used.

#### Startup

One of the most unique innovations was probably that of the collaboration concept itself. The State mandate forced partnerships among many that had not had prior relationships. The benefit was that both expertise and resources could be shared so that there were fewer overlapping and redundant tasks, and more efficiencies of scale.

#### Marketing and recruitment

- Several sites proposed targeting unique populations, including military corpsmen, migrant worker family members, and non-English speaking home care workers. The inclusion of WtW participants, who accounted for about one-third of the CTI participants, was another quasi-innovation, although it was State-imposed, rather than site-generated.
- A number of sites developed new screening instruments and assessment techniques that were geared specifically to qualifications of health care workers.

#### Training

- Distance learning and on-the-job training were mentioned in several proposals, with distance learning appealing to the more rural sites. These approaches are not innovative in the training world, but they were new to the sites. However, both were less successful and used on a much smaller scale than anticipated.
- Supportive services were available at all sites, and these ranged from the basics such as childcare, transportation and tutoring, to tuition reimbursement, books, uniforms, and lodging.
- Several sites offered training in other languages, although this caused some problems in the end, because at the CNA level upward, the qualifying examinations are offered in English only. To move up the career ladder, a command of the English language is necessary.
- Fast-track training, while not a new approach, was new to the CTI program sites, and was very well received and successful overall. With the development of a new collaboration comes the opportunity to coordinate services not previously coordinated. One example is educational partners working together on articulation agreements, thus making it easier for students to move among schools.

- The intensive case management afforded by additional funding was not overly innovative, but was anecdotally successful in decreasing the numbers of program dropouts.
- As a result of the CTI program, a number of facilities were upgraded to accommodate healthcare worker training programs. With new infrastructures in place, training may continue past the end of CTI funding.

## **B. WHERE WERE THE CHALLENGES?**

Overall, the challenges of conducting the program were much more substantial than program coordinators or other CTI staff anticipated.

### **Startup**

- Timing was a key issue for this program. With only one or two exceptions, collaborative staff were frustrated by not having enough time to adequately set up a new program with multiple, dispersed partners, to negotiate contracts, to obtain approvals for new programs, and to set up new infrastructures. The paperwork and reporting requirements caused more frustration.
- The collaboration model ranged widely in its intensity of application. It was embraced by some sites, and virtually ignored by others where partners functioned completely individually rather than as a part of a whole.
- Another factor that plagued the startup period for many sites centered on issues with criminal records. Not all program applicants were forthcoming about prior criminal records, and the State's criminal checks were very time consuming. This meant that, in some cases, clients finished training but were unable to receive their certificates or licenses.

### **Marketing and recruitment**

Most CTI program administrators agreed that the focus on Welfare-to-Work participants was particularly challenging, especially because they faced many more barriers than other program candidates, and thus it was difficult to find appropriate trainees. There were also external problems, coming from the WtW program itself, since that program emphasizes “work first” as opposed to training.

There were other challenges to CTI recruiting as well.

- Potential participants, as part of the low-income Californian pool, had limited English capabilities.
- A number of long term care facilities did not encourage training for their incumbent workers, because they feared that this would result in workers moving away to better positions.

## **Training**

Challenges and barriers related to training involved administrative issues like scheduling and finding enough training slots for students. Student needs for supportive services also presented challenges.

- Training programs were difficult to schedule, especially where they were tied to a quarter or semester schedules often found in the State's public education system. The problem was further complicated by many students' needs for pre-requisite classes.
- There was a bottleneck due to a lack of nursing instructors, who were much more difficult to recruit than were students.
- Childcare and transportation remained among the most needed services, and despite both being available across all sites, provisions were not always adequate.
- Other services were available, but participants still listed personal problems, family problems, or scheduling problems that prevented program completion.
- The availability of on-the-job training was very limited, even though it was much-needed by these low-income students. Similarly, cash incentives, though well-received, were rarely used.
- Formal mentoring was hardly used, though it was included in a number of proposals. However, informal mentoring (as in intensive case management) was an important element of the CTI program.

## **C. WHAT WERE THE ACCOMPLISHMENTS?**

### **Process and implementation successes**

Regarding recruitment, the CTI overall exceeded the original participation goals, with about 30% of the participants from the Welfare-to-Work program. The marketing and outreach strategies employed, combined no doubt with the economic downturn, were highly successful in bringing in more than the proposed number of trainees at eight of the twelve collaboratives.

At two sites--Riverside and San Jose--almost half of the CTI enrollees were WtW participants. There was a concerted effort to bring WtW participants into the program, and for the most part, the sites were successful in this aspect of recruitment. The consensus was, however, that this group was much more difficult to recruit, since they were less qualified academically than the population as a whole.

Most program successes related to training, where collaboratives tried approaches not previously used. Probably the most effective of these was fast-track training, developed with CTI funding by several collaboratives. This approach served the students well, and had the added advantage of getting much-needed caregivers into the workforce faster. Other approaches such as distance learning and on-the-job training were proposed, but were under-utilized (and thus not as successful as the fast-track approach).

Extra support was advantageous for the students. They benefited from more intensive case management, and from a wide range of supportive services. This no doubt contributed in

part to the fact that the CTI students were overwhelmingly favorable in their ratings of the training programs. Program administrators were also pleased with the additional support, and the flexibility that the funding allowed them. They were able to tailor services to the special needs of students, needs that varied among the collaboratives.

Some collaboratives worked diligently to coordinate and organize a number of local training programs. The result was that more students could be served more efficiently and with more flexibility. There was evidence that educational and employer partners in some collaboratives, rather than competing for resources and students, learned how to work together successfully.

One success was the emphasis on LVN and RN training, accounting for about 15% of the CTI trainees. The CTI was initiated with an emphasis on lower level workers, especially those needing Certified Nurse Assistant certification. However, a number of collaboratives realized that the need for nurses (particularly instructors) was even greater than the need for CNAs. At two sites--NoRTEC and Riverside--almost a quarter of the CTI trainees were in LVN or RN training courses. Over 800 RNs and LVNs were trained as a result of this program, a major accomplishment.

### **Who were the participants?**

In any evaluation it is important to learn as much as possible about program enrollee characteristics. One evaluation goal was to determine whether the program reached out to a different pool of potential healthcare workers. Findings indicate that this occurred, mostly because of the inclusion of former welfare recipients in the CTI program.

#### **General features of the CTI group--**

- Most of the participants in CTI were female (Table 8).
- There were a large number of single mothers in the program; 30% of participants were married, and 65% had children at home. For the WtW group (about 30% of all CTI trainees), 22% were married and 82% had children (Table 8).
- About 32% had a health care related job in the past year (Table 8).
- Participants differed by training type: LVN/RN trainees had more education, more work experience, and more cars than the other training groups, while CNA trainees had more children, less education, less work experience, more welfare experience, and fewer cars (Table 46-E, Appendix E).

#### **Compared with the WIA and WtW comparison groups--**

- Within the WIA group, CTI participants were more likely to be female, non-white, younger, and have more welfare experience than non-CTI trainees.
- Within the WtW group, CTI participants were more likely to be female, better educated, and have less welfare experience (Table 47-E, Appendix E).

#### **Compared with other CNAs in California (Table 48-E)--**

- There were fewer male CNAs in the CTI than in the non-CTI group (10.8% versus 14.1%).

- Age differences were negligible.
- The CTI CNAs were more likely to have used welfare, and to use it longer. Only about 18% of non-CTI CNAs received welfare during 2000-2001, compared with 56% of the CTI group.

#### Training successes--

- Almost 6,000 individuals were trained in a healthcare profession under the auspices of CTI.
- About 800 of these trainees were in LVN or RN programs, much higher numbers than anticipated by the program.

### **Who were the dropouts?**

#### Those who dropped out of the program were more likely to (Tables 37-D to 40-D)--

- Be younger, be African American, and not be married.
- Not own a car.
- Have a weaker work history, i.e., have lower earnings, no work in the last week or year, no work in a health-related job in the past year.
- Have not cared for someone regularly.

#### Predictors of staying in (versus dropping out) CTI training program were (Table 41-D)--

- Being in shorter training programs, like IHSS and CNA,
- Hearing about the program through established channels,
- Regularly caring for someone else, and
- Owning a car.

#### After training, the dropouts (Figures 1-D to 3-D in Appendix D)--

- Had lower employment rates.
- Had lower earnings.
- Were less likely to work in health care.

### **How do CTI participants fare in terms of post-training employment?**

#### In terms of general employment, at the second quarter after program exit--

- Comparing the CTI training groups, CNAs had the largest pre- to post-training increase in employment levels, from 48% to 74% employed (Figure 1).
- Comparing CTI participants to other WIA/WtW trainees, all groups improved. From pre-employment, the non-CTI WtW group showed the least improvement (only 8 compared with a 21 percentage point change for the CTI WtW group) (Figure 5).
- Comparing CTI trainees to other WIA/WtW trainees, and controlling for other variables, CTI trainees are significantly more apt (6%) to be employed (Figure 7).
- Comparing CTI-WtW participants to other WtW trainees, and controlling for other variables, CTI trainees have significantly higher (by 14%) rates of employment (Figure 7).
- Among all CNAs, there was little difference between CTI and non-CTI trainees (Figure 3).



- Among all CNAs, controlling for other variables, there was no difference between CTI and non-CTI groups for general employment levels (Figure 9).

In terms of healthcare employment, at the second quarter after program exit--

- Comparing CTI participants to other WIA trainees, healthcare employment is much higher for the CTI participants (43-44% versus 10-12%) (Figure 6).
- Comparing CTI participants to other WIA trainees, and controlling for other variables, CTI participants are significantly more apt (34%) to be employed in health care (Figure 8).
- Among all CNAs, controlling for other variables, there was no difference between CTI and non-CTI groups for healthcare employment levels (Figure 9).

Variables related to retention in health care work (two quarters) among CTI participants (Table 55-F, Appendix F)--

- Completing the program (43% more likely than dropouts to stay in healthcare).
- Having prior employment in health services (31% more likely).
- Being a non-citizen (17% more likely).
- Being in a CNA training program (18% more likely than other training groups).

**How do CTI participants fare in terms of career ladder mobility?**

In terms of earnings, at the second quarter after program exit--

- Comparing the CTI training groups, CNA earnings increased the most, almost doubling (Figure 10).
- Comparing CTI participants to other WIA/WtW trainees, pre- to post-training average earnings increased the most for the CTI participants, around \$1,000 per quarter (Figure 11).
- Comparing CTI participants to other WIA/WtW trainees, and controlling for other variables, earnings for CTI participants were 61% higher than for the other trainees (Figure 13).
- There were even larger differences for the WtW CTI participants whose earnings were 210% higher than the WtW trainee comparison group (Figure 13).
- Among all CNAs, there was little difference between CTI and non-CTI trainees; all earnings increased substantially, but the CTI CNAs, when controlling for other variables, made 23% less than the non-CTI CNAs (Figures 12 and 14).

In terms of personal goals--

- Of 804 CTI participants surveyed, over 60% stated they wanted to continue on in LVN/RN training, and eight in ten wanted more training in a healthcare related profession.
- Of 410 CTI CNA participants surveyed, over half (56%) wanted to become an LVN or an RN and over three-quarters wanted further training in a healthcare career.

### **How much impact regionally and statewide did CTI have?**

If we focus on CNAs only, the largest group of CTI trainees, there were 2,400 certified through CTI over two years, compared with 44,000 CNAs certified in the State during that time; overall, this increase of 7% is relatively small. More detailed analysis of CNA certificates issued statewide and over time suggests that about 4 out of every 10 CTI-trained CNAs were an addition to the overall supply of CNAs. This suggests that CTI did positively impact the supply of CNAs, but some degree of substitution existed. This estimate is only for the impact on the short-term supply of CNAs, however, since we do not yet know if the CTI-trained CNAs will have higher retention rates.

Regarding training infrastructures, some were expanded. The number of LVN training programs increased between 2001 and 2003 from 82 to 97. We attribute at least one of these new programs directly to CTI-funded activities. While the other programs cannot be directly attributed to CTI funding, the fact that CTI funding supported more than 600 LVN students indicates that CTI may have had some impact on this increase. The number of Psychiatric Technician programs increased from 11 to 13. Both of the latter programs were initiated as part of the CTI program.

### **D. WHERE NEXT?**

This report's recommendations are based on our analysis of the data and information collected for this Caregiver Training Initiative evaluation. Supporting any combination of the recommendations would help improve the impact of future programs, and would contribute to a much-needed increase in the number of caregivers in California. These recommendations can apply to both entry-level and higher-level healthcare workers. The State has already embarked on its Nurse Workforce Initiative, a program with much potential.

### **Recommendations for training programs**

#### ***➤ Provide sufficient time for program development and sustainability.***

As often occurs, programs like CTI require more time and resources than anticipated by policymakers. New initiatives should allow enough time for including local programs in the planning process, pilot testing, and making modifications.

#### ***➤ Promote Regional Collaboration, with flexibility.***

The regional collaboration required under CTI yielded mixed results in terms of increased economies of scale, resource sharing, and innovation. In some collaboratives there was tangible cooperation among partners, but the long-term collaborative impact is not yet evident. When funding ends, does the collaborative dissolve? Regional collaboration has advantages, but it would be useful to consider more flexibility in funding so that single counties, pairs of counties, and other sub-regional arrangements could also be supported.

- ***Partner with health care providers and educational providers to recruit caregiver instructors and mentors.***

The shortage of qualified instructors is a significant barrier to meeting current and future training objectives. Many RNs in or near retirement could fill this gap by sharing skills and insights with students. Partnerships among health care providers, community colleges, and adult schools could promote innovative ways of identifying and motivating qualified nurses to teach caregiver courses.

- ***Coordinate the activities of licensing boards and other State agencies to support new training program development.***

Some collaboratives had problems starting programs because of too-slow licensing of new programs. It would be useful for State licensing boards to become partners in any expansion-type caregiver training programs, be aware of the State's needs, and support caregiver programmatic growth. It also would be useful to ensure that the criminal background check process continues to become more streamlined.

- ***Make available program elements that could prevent dropping out, like flexible scheduling, fast-track training, and soft skills training.***

Some program components were very popular with students, and these should be included in future training programs. These apply not only to WtW workers, but also to other workers at entry-level positions where there are often gaps in training.

- ***Provide careful targeting and assessment.***

Because health caregiving requires much more than intellectual and physical ability, special attention should focus on developing and testing assessment tools. Our findings for CTI trainees (though based only on two quarters past training) indicate that not being a program dropout, being a non-citizen, and prior work in health care are significant predictors of staying in the healthcare workforce. Such knowledge, with more refinement, could be beneficial in future targeting and screening programs.

- ***Find out what works and what does not work, and support successful programs.***

Any new program must be evaluated and monitored. Program evaluations, especially in lean economic times, are important to determine if a program is meeting its goals and merits continued support. Evaluations can highlight program elements that work and those that do not work; such feedback to program administrators can increase efficiency and usefulness. Effective management information systems are crucial, as are tracking retention rates and wage changes over time.

### **Recommendations for increasing the pool of health care workers**

- ***Increase commitments crucial to training and retaining caregivers.***

It is not possible to address the critical shortage of caregivers without a strong and meaningful commitment from the Office of the Governor and the California Legislature. Such a commitment is exemplified by two more recent WIA-funded grants. One is a \$10.5 million grant awarded to the Quality Care Health Foundation, the educational branch of the California Association of Health Facilities, to recruit, train and retain caregivers through existing health

care facilities. The other is the Nurse Workforce Initiative, with \$60 million in funding awarded to two dozen collaboratives to increase the number of nurses in California using innovations such as building career ladders and reforming health workplaces.

- ***Create partnerships between healthcare training providers, WIA, and Welfare-to-Work programs.***

Our findings show that the Welfare-to-Work participants trained in this program performed just as well as non-WtW caregivers, and even better than other WtW trainees. Other studies have had similar results (VNA Foundation, 2001). This group, however, was more challenging to recruit, and needed more supportive and educational services, including basic English, math, and other prerequisite job-related skills. Continuing health caregiver training partnerships with local WIBs or other training facilities as a long-term investment could not only provide the needed support, but also expand the pool by supplementing educational training.

- ***Provide incentives for training providers to be more responsive to workers' needs.***

In an ideal world, training and educational institutions would be rewarded with higher funding levels and would be able to expand if they could successfully meet special needs of healthcare workers desiring further training. This might include providing more supportive services, flexible scheduling, on-the-job training, or more clinical classroom space.

- ***Facilitate communication among EDD personnel and agencies responsible for training and retaining caregivers.***

In addition to requiring regional dialogues among agencies and organizations providing training and retention services for caregivers, we recommend regular communications among training agencies and EDD Regional Managers. These Managers can provide insight about statewide activities and about approaches used successfully elsewhere. Their expertise was vital to the success of the CTI program, and seems equally vital to future programs.

- ***Broaden the scope of search for potential caregivers.***

CTI program trainees who were caregivers before training were more likely to stay in the program and to stay in the health care field. Those who have already worked as caregivers might be enticed to return to the field if the compensation and benefits were more appealing and a career ladder more accessible. Where caregivers have already received formal training, re-training would be less costly than fully training a new healthcare worker. The military corpsmen, migrant workers, and non-English speaking home care workers targeted by some of the sites suggest a few other possibilities, including hard-to-employ populations and high school youth.

### **Recommendations for increasing retention in health care work**

In order to increase the healthcare work force, it is important to expand the workforce pool, and it is also important to retain workers in the field of healthcare. Several promising retention approaches merit further study.

➤ ***Encourage career ladder opportunities.***

Our findings show that most workers recruited into this program are interested in moving up the health care career ladder. Not everyone has the resources to do this, however, especially those who are working at low-income entry level caregiver jobs. It is important that efforts be made to assist those who have the ability and the desire to continue their education in healthcare-oriented careers. Previous studies have shown that upward mobility is affiliated with retention.

➤ ***Engage employers to provide assistance to workers.***

Many workers, at entry-level positions especially, need job-related services that are not always available. This study showed that WtW clients have great promise as caregivers, but many who are single mothers with other barriers may have crucial unmet needs. When employers assist with supportive services, they are enhancing employees' chances for success and greater retention. Two crucial challenges for low-income populations are childcare and transportation, both regular and backup.

➤ ***Support wage and benefit increases for caregivers.***

Low wages may not be the most important factor in the high turnover among CNAs, but they are an important factor. In a recent survey of 30,000 CNAs, 82% chose "increased pay" in response to the question, "what changes to your job would be most important for you and/or bring you greater job satisfaction." As part of the Aging with Dignity Initiative, wage pass-throughs were mandated for nursing home employees, but that program is in jeopardy, due to the current state budget crisis. Continued study of the implementation and effectiveness of wage pass-throughs as a mechanism to increase retention of the long-term care workforce is important.

➤ ***Encourage programs known to improve worker satisfaction.***

Entry-level caregivers receive little or no training before assuming major responsibilities affecting a patient's quality of life. Mentoring programs during and after initial training show promise for creating climates of better patient care, more worker confidence, and higher retention. Workshops and in-service programs cost little, can improve care, and have been shown to increase worker satisfaction and retention. Similarly, the recently passed California staffing ratio law bodes well, but this applies to nurses only.

➤ ***Support continued evaluation, especially of retention patterns***

Most of the CTI collaboratives exceeded their goals for numbers of caregivers trained, but these caregivers need to remain in the healthcare field. Our findings are limited because they extend only two quarters past the training period. We recommend further research that combines secondary data analysis, surveys, focus groups, and interview methodologies to better understand caregiver retention for a much longer post-training period. We also recommend support of pilot studies that assess different approaches to increasing retention, based on findings from previous studies. For example, recent research shows that autonomy, job satisfaction, and group cohesion contribute to job retention among nurses (Wells, Roberts, and Medlin, 2002), and that input into care planning and more in-service programs are related to retention of nursing assistants (Banaszak-Holl & Hines, 1996; Caudill & Patrick, 1991-92). Prior to implementation, pilot studies should be based on sound theoretical frameworks and findings from previous testing.

## Summary

The proportion of Californians over age 65, 85, and even 95 will increase dramatically over the next two decades. There are not enough caregivers in California to respond to current and future demands from elderly and other populations, and this worker shortage can threaten patient safety and compromise quality of care. To address these issues, the State of California established the statewide Caregiver Training Initiative (CTI) in 2000 to help recruit, train and retain caregivers through twelve collaborative programs.

Our evaluation of the CTI provides significant and somewhat unexpected findings. Despite program time constraints and other limitations, our findings indicate that the CTI program exceeded expectations. Not only did the CTI program increase the supply of certified nurse assistants (CNAs), but it also trained more than a thousand advanced-level healthcare workers, such as nurses and psychiatric technicians. Participants fared well; comparing CTI participants to other WIA/WtW trainees, and controlling for other variables, earnings for CTI participants were 61% higher than for the other trainees. As expected, there were positive healthcare outcomes. Comparing CTI participants to other WIA trainees, and controlling for other variables, CTI participants were significantly more apt (34%) to be employed in health care two quarters post-training.

Moreover, the program reached beyond the usual targets for CNA training, as indicated by the demographic diversity of the CTI trainees compared with other CNAs. Related to this is the very positive impact of the Welfare-to-Work component of the program. In spite of the fact that the WtW population was harder to recruit and to train, in the end (as measured by two quarters post-training) this group benefited the most from the CTI training. They appear to be a good investment, with employment rates higher than comparable groups.

Finally, most of the CNAs in this program expressed a strong interest in continuing their education and moving up the healthcare career ladder. This is an indicator of program success, as well as a guidepost for future directions. Thus, it seems logical that the next step might be to offer further training to this group. Indeed, about a third of the participants in the newly funded Nurse Workforce Initiative come from the CNA ranks. An added advantage is that those with previous healthcare work experience have higher rates of continued employment.

If the healthcare workforce crisis is to be addressed adequately, then funding will have to support training in areas where there are known shortages. Training dollars should be invested carefully, focusing on those who have shown commitment. This means that training sites need to target carefully, not only to reach new pools of workers, but also to reach workers who have potential and who will stay. The CTI evaluation indicates that such an approach can benefit low-income workers and welfare-to-work participants, as well as the State as a whole.

Concomitantly, there should be funding for ongoing research to answer questions pertaining to which needs exist, whether training is meeting those needs, how effective training is, and who are appropriate targets of training. This is especially important given a recent federal report that states, "to date, most research on initiatives to address the nurse aide shortage has been largely nonevaluative." (GAO, 2001e, p. 17).

This evaluation was limited by not having enough information available, for example, about the State's LVN and RN populations, and by a lack of time to adequately analyze retention rates after training. Thus, we know much less about the program's impact on recruitment and retention of nurses, and more generally about the longer-term impact of the CTI program. Future research should address gaps in our understanding about and approaches to strengthening the caregiver workforce in California.

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## **APPENDIX A. RESULTS FROM TRAINING SATISFACTION SURVEYS**

## RESULTS FROM THE TRAINING SATISFACTION I SURVEY

As part of the evaluation for the CTI program, 820 Training Satisfaction Surveys were administered at the four focus sites between June 2001 and December 2002. The self-administered questionnaires were completed when the students were about three-quarters through the program to insure that the students would have a complete understanding of the program. Sites were asked to have a person affiliated with CTI only, and not with the training program, administer the questionnaires, so that students would feel more comfortable about answering the questions honestly. Survey findings are reported below.

### *Who are the survey respondents?*

Seventy-five percent of the respondents were in CNA training, 13% in IHSS home care provider training, and 11% were in LVN programs<sup>8</sup>. Most of the students (88.2%) were female, with a mean age of 31.8 years old, and a range from 18 to 70 years of age. About one in five had less than a high school diploma and 38% had some education beyond high school (See Table 11-A).

**Table 11-A. Demographic Characteristics of Survey Respondents (N=820)**

Gender (% female)	88.2
Age (mean)	31.8
Ethnicity	
<u>Education</u>	
8 <sup>th</sup> grade or less	1.0
Some high school	17.4
High school diploma	35.9
HS equivalent diploma (GED)	7.9
Technical or trade school	5.0
Some college or 2 year degree	29.0
College graduate -- 4-year degree	3.8
<u>Percent worked for pay in a health care setting*</u>	
Hospital	7.6
Nursing home	10.2
Residential care/assisted living facility	15.3
Home health care	19.5
Other	7.9

\*Note: Categories are not mutually exclusive.

<sup>8</sup> These findings are based on 573 questionnaires (70% of all questionnaires) for which training program information was available.

Regarding prior work experience, 56.4% had not worked for pay in a healthcare setting in the past two years. The most common experience was in home health care, where one in five of respondents had worked, being hospital experience the least frequent.

*Reasons for participating in the program*

Students were asked to choose from a list of reasons for being in the program, and the majority indicated personal interest in caregiving or wanting to get a degree and/or improve their skills (See Table 12-A). More than eight in ten said that it was something in which they were personally interested, that they wanted to get a certificate or degree, that they liked the idea of being a healthcare provider, or that they wanted to improve their job skills.

When asked which reason was most important, a third selected “it’s something I’m personally interested in.” One in four selected “wanted to get a certificate/degree,” and about one in five selected “wanted to improve job skills.” Only a handful stated that they felt they had no choice or that they were doing it just because someone else recommended it. While 85.9% felt they had a lot or some say about the kind of training program they entered, 14.1% felt that they had hardly any or no say at all (not shown in table).

**Table 12-A. Reasons for participating in the training program, and ranking by importance.**

Reasons	Yes*	Most Important?
My caseworker recommended the program	10.3	0.9
Someone else recommended the program	33.9	1.0
I wanted to get a certificate or a degree	81.3	25.0
I wanted to improve my job skills	78.7	18.2
It’s something I am personally interested in	84.7	33.9
I had no choice because of my welfare program.	1.4	1.0
I liked the idea of becoming a healthcare worker	80.8	16.2
It was the only training program available to me.	6.3	0.1
Other	10.5	4.5

\*Note: These response categories were not mutually exclusive.

The “most important” response categories were mutually exclusive

*How satisfied are students with the training program?*

In response to questions pertaining to various aspects of the training program, such as the instructors, the courses, class topics, and program flexibility, CTI participants were significantly favorable in their responses (Table 13-A). When asked about their overall satisfaction, an impressive 94.4% of students strongly agreed or agreed that they were satisfied with the program. Moreover, about 93% said they would recommend the program to a friend and only 0.8% said they would not (table not shown).

**Table 13-A. Satisfaction with various aspects of the training program (%)**

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Not sure</u>	<u>Disagree</u>	<u>Strongly Disagree</u>
The instructors are well prepared.	64.6	25.8	2.8	4.6	2.2
The class presentations are well planned and organized.	54.3	34.7	4.1	4.8	2.1
The instructors explain the material so that it is easy to understand.	65.1	28.1	2.7	2.2	1.8
The classes are much too difficult.	2.0	7.5	7.2	41.6	41.7
What I am learning will be useful to me in my healthcare work.	76.5	19.2	1.6	0.7	2.0
I am never able to ask questions when I need to.	3.2	4.7	4.1	25.6	62.3
I am satisfied with the help given me by instructors.	64.0	28.1	3.2	2.6	2.1
The instructors care about the students in their classes.	65.9	25.6	5.4	1.1	2.0
The program has not covered all of the things I need to know for a healthcare job.	3.9	8.6	10.6	32.4	44.4
The program has enough flexibility to meet my needs (e.g. night classes, telephone help).	40.8	36.2	12.7	7.1	3.1
I would prefer a program located somewhere else.	2.8	8.5	11.8	33.4	43.6
I am not able to practice the new skills I'm learning with real people.	3.0	5.7	5.9	35.9	49.4
Because of this program I will be able to earn more money in my next job.	51.0	30.9	14.0	2.9	1.2
Overall, I am satisfied with this training program.	66.8	27.6	3.2	1.6	0.9

We also asked students about what further training they would like, and almost 70% of all respondents mentioned training in one or more health care programs. Furthermore, 76% of CNA students, 58% of LVN trainees, and 57% of IHHS workers stated they wanted more advanced training in a specific health care program (Table not shown).

Almost half of the CNA program participants expressed an interest in LVN programs, and nearly one in three indicated an interest in RN programs (Table 14-A). Many also mentioned specialty programs such as EMT, acute hospital care, and phlebotomy. Only 4.6% of respondents stated they did not expect to further their education. It appears that the majority of students responding are thinking about career tracks, which is an important goal of the program.

**Table 14-A. Areas of interest for further training (N=820)**

CNA	4.8%
LVN	40.2%
RN	28.7%
Other health care programs	19.0%
None	4.6%
Other answers	12.1%
Don't know	2.4%

\* Note: categories are not mutually exclusive

*What are the perceived strengths and weaknesses of the program?*

When asked about the best part of the training program, student comments were diverse (Table 15-A). The most positive comments concerned the learning experience itself, plus the clinical work and hands-on experience with patients. Instructors are considered a main asset of the training programs, being understanding, encouraging, and helpful to students throughout the program.

**Table 15-A. Best and worst parts of training program**

<u>The best part of program...</u>	
The learning	32.2%
Hands-on training	29.5%
Instructors	18.4%
Helping people	9.5%
Everything	5.4%
Others	8.3%
<u>The worst part of program...</u>	
Nothing	38.3%
Work load, examinations	5.6%
Bad organization of program	4.8%
Instructors	3.8%
Bad CNA practice in clinical sites	2.6%
Travel/distance to training site	2.2%
Getting up early/go to class everyday	2.2%
Leaving the residents/seeing them die	2.2%
Others	27.2%

\* Note: categories are not mutually exclusive

When asked what was the worst part of the training program, about 4 in 10 stated “nothing.” Among a broad range of negative comments mentioned by a small proportion of



students, there were references to the workload and examinations, lack of organization, and some specific instructors. There was also a long list of personal issues, like adjusting to a new routine, or becoming attached to the residents with whom they worked, and then having to leave them.

## COMPARING EARLY WITH LATE PROGRAM PARTICIPANTS

During the course of the evaluation, we were aware that the responses to the training programs changed over time, particularly those responses relating to administrative difficulties that might change with experience and time. Thus, we felt it useful to compare responses of those who enrolled early with those who enrolled in the middle and at the end of the program. We divided the survey administration period into three shorter periods accounting for early, middle, and late stages of training program implementation, keeping the groups as equal in size as possible. The early period covers the program's first six months, the middle period the next three months, and the late period the last six months, approximately. Because we omitted some very early and very late "outliers" the total number of surveys analyzed is 790, with 251 in the early group, 184 in the middle, and 355 in the late group<sup>9</sup>.

### *Did student characteristics change over time?*

Gender proportions, highly female, remained relatively static over time, although there was a moderate decrease at the end, with 84% female. The average age was also fairly stable (Table 16-A). Students who took the training program in the late period had slightly higher educational levels than those who entered the program earlier. For example, 16.9% of late period students had less than a high school diploma, compared to 21.4% among early students. And, 36.4% of students from the late period had some college education or were college graduates, while for the early and mid period the proportions are just under 30%.

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<sup>9</sup> The proportion of students from different sites varies in the different periods, with larger proportions of students from San Jose and smaller proportions of students from Long Beach in the late stage.

**Table 16-A. Demographics, by Time of Program Enrollment**

	<u>Early</u>	<u>Middle</u>	<u>Late</u>
<u>% Female</u>	92.0	90.8	84.2
<u>Mean age</u>	31.1	33.7	31.6
<u>Education</u>			
8 <sup>th</sup> grade or less	0.8	0.6	1.1
Some high school	20.6	18.8	15.8
High school diploma	38.3	36.5	34.4
GED diploma	6.0	9.9	7.0
Technical or trade school	5.6	4.4	5.4
Some college or 2 year degree	26.2	27.1	31.0
College graduate (4- year degree)	2.4	2.8	5.4
<u>Percent with any health care experience</u>	44.0	45.1	41.7
<u>Work experience by health care setting</u>			
Hospital	5.6	6.0	9.4
Nursing Home	8.0	7.1	12.6
Residential care/assisted living facility	16.5	17.6	12.6
Home Health Care	23.6	26.4	13.2
Other	7.7	6.0	8.9
<u>Training site location</u>			
Kern	69.3	39.9	51.5
Long Beach	19.9	21.9	5.9
Sacramento	1.6	27.9	5.9
San Jose	9.2	10.4	36.6

In terms of work experience, the early and middle cohort students were more similar to each other than to the late cohort, and except for nursing homes, had somewhat more experience than later-enrolling students. In the early period, 44% of the students had had some health care experience in the last two years, compared to 41.7% in the late cohort. There are also slight differences in the specific settings where this experience was acquired. For instance, around one-quarter of the students from the early and middle periods had worked in home health care, while only 13.2% of the late students had done so.

Some of these differences may be due to uneven site influences, since not all sites were equally represented in all the time frames, as depicted in Table 17-A. The Kern site dominates the early group, the middle group is more even across sites, and San Jose and Kern dominate the last group. The most unique of the four sites in terms of training programs is Long Beach, with almost three-fourths of its trainees being IHSS workers; the other sites had none.

*Did satisfaction with the program change over time?*

Satisfaction levels remained relatively uniform through out the program, though somewhat higher in the middle group. The early group was more critical than the later group of the preparation of instructors and organization of classes. This criticism though, does not extend to the helpfulness and caring attitude of instructors, which is high in all time periods.

**Table 17-A. Satisfaction with Training Program.**

<u>Percent who agree/strongly agree that...</u>	<u>Early</u>	<u>Middle</u>	<u>Late</u>
The instructors are well prepared.	83.8	97.8	91.2
The class presentations are well planned and organized.	83.9	92.8	90.3
The instructors explain the material so that it is easy to understand.	93.2	97.8	91.1
The classes are much too difficult.	7.0	11.4	10.3
What I am learning will be useful to me in my healthcare work.	97.2	96.7	93.6
I am never able to ask questions when I need to.	8.5	7.3	8.4
I am satisfied with the help given me by instructors.	91.1	97.3	90.4
The instructors care about the students in their classes.	89.8	96.1	90.3
The program has not covered all of the things I need to know for a healthcare job.	11.7	10.2	14.4
The program has enough flexibility to meet my needs (e.g., night classes, telephone help).	76.8	80.8	76.4
I would prefer a program located somewhere else.	13.6	11.8	9.7
I am not able to practice the new skills I'm learning with real people	7.2	9.6	9.1
Because of this program I will be able to earn more money in my next job.	81.1	82.2	81.1
Overall, I am satisfied with this training program.	93.1	97.2	94.3

Comparing student responses to the best and worst parts of the training program showed only very small differences (Table 18-A below). Interestingly, instructors were mentioned as responses to questions about both the best and the worst parts of the program. Later in the program, fewer trainees mentioned instructors as the best part. Learning, and helping people, also declined in popularity. As expected, the numbers of those stating that the program was badly organized decreased over time, but fewer people said “nothing” was wrong with the program.

**Table 18-A. The Best/Worst Parts of Training Program**

<u>Best part...</u>	<u>Early</u>	<u>Middle</u>	<u>Late</u>
The learning	38.2	35.9	26.8
Hands-on training	29.5	28.3	29.3
Instructors	21.5	20.7	15.2
Helping people	15.5	3.8	8.7
Everything	4.0	8.7	4.5
<u>Worst part...</u>			
Nothing	42.6	44.6	32.7
Workload, examinations	8.4	1.6	4.8
Bad organization of program	8.0	6.0	2.0
Instructors	4.8	1.1	4.2

\* Note: categories are not mutually exclusive

## RESULTS FROM THE TRAINING SATISFACTION II SURVEY

The purpose of the Training Satisfaction II (TS-II) questionnaire was to capture student perceptions about the training program after they have had the opportunity to apply their new skills in the labor market. Unlike the Training Satisfaction I Surveys that were administered face-to-face by CTI staff, the TS-II surveys were conducted by UCLA staff who telephoned the trainees at home. Thus, the TS-II responses may be less biased by the environmental setting (e.g., the instructor is not standing nearby). On the other hand, they may be biased in other ways (e.g., recall difficulties due to the amount of time that has passed since training).

Trainees were phoned for follow-up only if they consented to be contacted for a second interview by providing their names and phone numbers at the end of the first training satisfaction questionnaire. From the original 820 surveys, 448 (54.6%) consented to further contact. From these, 113 numbers were incorrect or disconnected, 161 could not be reached after several calls (person moved, nobody answered the phone, person was never home, line was busy, etc.), and 14 spoke neither English nor Spanish, or refused. In all, 160 TS-II interviews were completed. The calls were made between December 2001 and April 2003 in English or Spanish.

Administered approximately six months after program entry, presumably enough time for most students to be working in the field, TS-II surveys were designed to determine if student attitudes would change once they were actually working. In addition to questions parallel to those asked in the first survey, TS-II addressed issues related to present employment situations and experiences after training.

### Who are the Satisfaction II survey respondents?

Most of respondents were female, with a mean age of 34.4 years, ranging from 18 to 71 years old (see Table 19-A). About one-third were 24 years of age or younger, and about one-quarter were older than 45 years of age. About one of five had less than a high school diploma, and four out of ten had some education beyond high school. Compared with all CTI participants, this group is somewhat older, and somewhat better educated.

**Table 19-A. Demographics: Training Satisfaction II Survey Respondents (N=158)**

% Female	91.0
<u>Age (%)</u>	
18-24	31.3
25-34	24.0
35-44	20.7
45-71	24.0
Mean/Median	34.0/32.0
<u>Education</u>	
8 <sup>th</sup> grade or less	0.6
Some high school	17.3
High school diploma	35.3
HS equivalent diploma (GED)	5.1
Technical or trade school	1.9
Some college or 2 year degree	32.7
College graduate--4-year degree	6.4
<u>Percent worked for pay in a health care setting*</u>	
Hospital	26.3
Nursing home	40.4
Residential care/assisted living facility	35.3
Home health care	28.8
Other	10.3

\*Note: Categories are not mutually exclusive.

Regarding work experience, and excluding CTI training, 23.7% had not had a paid job in a health care setting in the last two years. The most commonly cited work experiences were in nursing homes and residential care/assisted living facilities, followed closely by hospitals and home health care.

*Reasons for participating in the program*

When asked for their reasons to enroll in the program, over 90% of trainees mentioned the desire to improve job skills, personal interest, and liking the idea of becoming a healthcare worker (Table 20-A). About 83% of respondents selected “Getting a certificate or degree.” About 13% indicated that their caseworker recommended the program, and about three in ten indicated that someone else had recommended the program. Few stated that they did not have other training program choices.

**Table 20-A. Reasons for Participating in the Training Program\***

<u>Reasons</u>	<u>%</u>
My caseworker recommended the program.	13.5
Someone else recommended the program.	28.8
I wanted to get a certificate or a degree.	83.3
I wanted to improve my job skills.	90.4
It's something I am personally interested in.	96.8
I had no choice because of my welfare program.	2.6
I liked the idea of becoming a healthcare worker.	94.9
It was the only training program available to me.	7.7
Other.	17.3

\*Note: These response categories were not mutually exclusive.

*How satisfied were students with the training program?*

When respondents were asked how satisfied they were with specific aspects of the training program, such as instructors or the difficulty of classes, the overall response was highly favorable (Table 21-A). Regarding overall satisfaction, almost 94% of respondents claimed to agree or strongly agree that they were satisfied with the training program, and they overwhelmingly agreed that they would recommend the program to a friend.

**Table 21-A. Satisfaction with Various Aspects of the Training Program (%).**

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Not sure</u>	<u>Disagree</u>	<u>Strongly Disagree</u>
The instructors were well prepared.	42.9	51.3	0.6	2.6	2.6
The instructors explained the material so that it was easy to understand.	53.2	38.5	2.6	3.8	1.9
I did not learn new things in this training program.	0	3.2	1.3	60.9	34.2
The classes were much too difficult.	0	1.9	2.6	69.9	25.6
What I learned is useful to me in my healthcare work now.	46.5	49	1.9	1.9	0.6
I find the things I learned in training hard to remember.	0.6	5.2	2.6	72.3	19.4
I often refer back to things I learned in my training.	29.2	59.7	2.6	7.8	0.6
My work is much easier now because of the training I had.	33.1	57	4	4.6	1.3
The training procedures and equipment were outdated.	3.3	11.1	3.3	69.9	12.4
The program did not cover all of the things I need to know for a healthcare job.	2.6	15.6	5.8	63.0	13
Because of this program I am able to earn more money in my job.	16.3	58.2	5.2	18.3	2
Overall, I was satisfied with this training program.	43.6	50.6	1.3	3.2	1.3

One relevant goal of the program was to increase interest for a career track in the health care field. When asked about future training goals, 81.2% of respondents stated that they would like to get further training in health care, and only 6.9% said they were not interested in more training (See Table 22-A). RN training is mentioned most frequently, followed closely by LVN training; over three-quarters selected one of these two nursing programs.

**Table 22-A. What Training Would You Like in the Future?**

CNA	4.6%
LVN	37.6%
RN	25.2%
Other health	13.8%
Other not health	11.9%
None/do not know	6.9%

*What are the perceived strengths and weaknesses of the program?*

Almost 40% of respondents felt that the single most helpful aspect of the program was the hands-on training (See Table 23-A). About 18% mentioned the instructors, and 14% declared that “everything” was helpful. There was a wide range of other responses, among

which references to personal accomplishment were frequent. Some of the others included references to particular aspects of the training, such as, *“I learned about Alzheimers,” “The information about lifting, taking care of ourselves, and the patient,” and “CPR”.*

**Table 23-A. Best and Worst of Training Program\***

<u>Most helpful part of program</u>	
Hands-on training	36.3%
Instructors	17.5
Everything	13.8
Others	29.1
<u>Least useful part of program</u>	
Nothing	75.0
Other	21.9

\* Note: categories are not mutually exclusive

Asked about the least useful part of the training, 3 in 4 respondents said that nothing was least useful. For the rest of the respondents, the range of responses is very wide. Examples are *“changing diapers,” “we wrote too much,” and “the real world in nursing homes,” “too many patients,” “too many hours doing beds and dirty diapers instead of letting us to learn more advanced procedures,” “too long sessions,” “lack of equipment and updated textbooks,” “books...too easy,” and “common knowledge things [like brushing teeth]--we do not need to learn how to do it.”*

#### Where are respondents working after graduating?<sup>10</sup>

At the time of the second interview (approximately 6 months after entering the program), more than two-thirds (67.8%) of the respondents were employed and practicing the skills they had acquired through the CTI training (as CNAs, LVNs, etc.). Near a fourth were not working (23.8%), and less than one tenth (8.4%) were working outside the health care field. When respondents were asked why they were working in a non-health field, some stated that they had health problems that impeded them from doing the required demanding physical work, or that they found another job that was more convenient, or that it was their personal preference.

## COMPARISON OF SATISFACTION I AND II

Training Satisfaction Surveys I and II intentionally had many overlapping questions, and this section compares information common to both surveys. The tables below compare the two survey responses for the sample of 160 respondents.

#### Did work experience in health care settings increase?

During the six months that passed between the two interviews, the proportion of people with work experience increased in all the health care settings mentioned in the survey. By the time of the second interview, the proportion of those who had worked in the last 2 years for

<sup>10</sup> This section is based on 145 surveys (92% of total respondents) in which the questions were included.



hospitals, nursing homes or residential care facilities doubled or tripled (Table 24-A). Home health, however, increased the least.

**Table 24-A. Percent Who Worked For Pay in a Health Care Setting**

	Time I	Time II	% change
Hospital	10.1	26.3	156.3
Nursing Home	12.7	40.4	215.0
Residential care	18.5	35.3	89.7
Home Health Care	24.7	28.8	15.4
Other	5.7	10.3	77.8

*Did perception about specific aspects of the program change?*

After six months, opinions about the program remained highly favorable overall, with little change over time (see Table 25-A). Two exceptions are items #3 and #5 below. At the first interview few people felt that classes were too difficult, and by the second interview that proportion decreased even more. The proportion increased for those who thought the program did not cover all that was necessary; in real numbers this means eight additional respondents by the second interview felt the program needed to cover more.

**Table 25-A. Satisfaction with Various Aspects of the Training Program (N=160)**

	Time I	Time II	% change
1. Instructors are/were well prepared.	86.0	94.2	9.5
2. Instructors explained material so it is easy to understand.	90.5	91.7	1.3
3. The classes are/were much too difficult.	7.9	1.9	-75.9
4. What I learned is useful to me in my health care job.	94.8	95.5	0.7
5. Program didn't cover all I need to know for a health care job	12.9	18.2	41.1
6. Because of this program I am/will be able to earn more money.	83.6	74.5	-10.2
7. Overall, I am/was satisfied with this training program.	93.7	94.2	-0.5

*Are students still thinking about career ladders?*

Regarding what further training the respondents would like to pursue, shown in Table 26-A below, there appear to be changes. However, comparisons must be interpreted cautiously. This question in the first survey was open-ended, answers were not mutually exclusive, and the responses required coding. Altogether, the responses add to 109% so there were not a lot who chose more than one. In the second survey, the question was closed-ended, and respondents were asked to choose only one option. In comparing them then, we need to be reminded that the first time series will be slightly inflated, by roughly ten percent. Given that caveat, it appears that the largest change is among those who wish to pursue RN training. From one-quarter at the first interview, the proportion increases to 40%.

**Table 26-A. What Further Training Respondent Would Like**

	Time I	Time II	% change
CNA	6.9	5.8	-15.9
LVN	40.6	32.0	-21.2
RN	24.4	40.2	64.8
Other	29.4	16.3	-44.6
None/Don't know	7.5*	5.8**	---

\*Categories are not mutually exclusive

\*\*Categories are mutually exclusive

We decided to compare in more detail the changes between Time I and Time II, with results in Table 27-A. In general, students' aspirations became higher after they completed their CTI programs and started working. For example, of the 60 students who said during their training that later they would like to pursue an LVN license, 21 of them changed their responses six months later to a higher pursuit, an RN license.

**Table 27-A. Goals at Time I Compared with Time II**

<i><u>Time I</u></i>	<i><u>Time II</u></i>				
	<u>CNA</u>	<u>LVN</u>	<u>RN</u>	<u>Others</u>	<u>TOTAL</u>
CNA	6	2	0	3	11
LVN	2	30	21	7	60
RN	1	4	29	3	37
Others	-	14	21	10	45

*Did the perceptions about the program's strengths and weaknesses change?*

After six months a substantial number of respondents still considered the hands-on training as one of the program's strengths, and the proportion of respondents who thought everything was positive increased (Table 28-A). The largest decreases were for proportions of those mentioning as program strengths "learning" and "helping people." It should be noted, though, that the wording for the two questionnaires differed. Satisfaction I questionnaire asks, "What has been the best (and worst) part of the training program?" while Satisfaction II asks "What was the most helpful (and least useful) part of the training program?" Given these differences, Time I-Time II comparisons should be interpreted somewhat cautiously.

Most notably, regarding the program's weaknesses, by the second interview, many more of those trained thought that "nothing" about the program was negative.

**Table 28-A. Comparing Most and Least Helpful Parts of Program**

	Time I (%)	Time II (%)
<u>The best/most helpful part...</u>		
Hands-on training	32.5	36.3
Instructors	20.6	17.5
The learning	35.6	2.4
Helping people	10.6	1.3
Everything	5.6	13.8
Others	4.4	28.8
<u>The worst/least useful part...</u>		
Nothing	35.0	75.0
Work load, examinations	5.6	0.0
Bad organization of program	7.5	0.6
Others	8.1	21.9

## COMPARING FINDINGS AMONG FOUR COLLABORATIVE SITES

We were interested in knowing how much variation there was among the four training sites. The number of interviews analyzed per each focus site was 111 for Long Beach, 454 for Kern, 76 for Sacramento and 177 for San Jose.

### *Do the demographic characteristics of students differ among the training sites?*

The demographic characteristics of students who responded to the surveys from the four focus sites vary slightly. Students from Long Beach were, on average, about ten years older than students from Kern and Sacramento, and seven years older than students from San Jose (Table 29-A). The proportion of females among the students was highest in Sacramento (96.1%) and lowest in San Jose (82.2%). Nearly half the students from Long Beach had more than a high school diploma, a higher proportion than in the other sites; and Sacramento had more students with less than high school education. Note that these differences, in general, reflect the differences among the sites for all CTI participants.

More than half (53.8%) of the students from Sacramento had had previous working experience in health care settings, significantly more than in the other sites. Long Beach comes next, with 31.3% and San Jose and Kern follow, with 20.0% and 17.2% respectively. (Table not shown). Looking at the specific settings, students from Long Beach were noticeably more experienced in home care than the rest.

**Table 29-A. Demographics of Satisfaction I Respondents --Comparing Sites**

	Long Beach (N=111)	Kern (N=454)	Sacra- mento (N=76)	San Jose (N=177)
Age (mean)	40.1	29.1	30.7	33.9
Gender (% female)	88.3	89.2	96.1	82.2
<u>Education</u>				
Less than high school	18.2	15.3	27.6	22.9
High School/GED diploma	34.6	48.8	38.2	38.8
More than high school	47.2	35.9	34.2	38.3
<u>Percent worked for pay in health care setting</u>				
Hospital	9.1	9.0	8.0	2.9
Nursing Home	7.3	12.1	9.3	7.6
Residential care	20.9	13.7	20	14
Home care	45.5	13.7	21.3	17.6

\*Note: Categories are not mutually exclusive

*Are students from different sites equally satisfied with the program?*

The level of satisfaction with different aspects of the training program was relatively uniform among the sites. Table 30-A shows examples where perceptions were more diverse. Students from Long Beach were a little less likely than students from other sites to find the classes to be well planned and organized. About one in five students from San Jose found classes too difficult, compared with only about one in twenty at Kern.

Students in Kern were the most satisfied with the flexibility of the program, whereas students from San Jose were the most critical. However, even in this last group, more than two thirds agreed or strongly agreed that the flexibility of the program was enough to meet their needs.

**Table 30-A. Satisfaction with Various Aspects of the Training Program**

....% who agree or strongly agree that....	Long Beach	Kern	Sacramento	San Jose
The class presentations are well planned and organized.	81.6	90.4	87.6	90.2
The classes are much too difficult.	9.6	5.4	13.7	18.6
The instructors care about the students.	85.3	92.8	94.6	90.7
The program has not covered all of things I need to know for a health care job.	16.7	10.6	9.5	16.4
The program has enough flexibility to meet my needs (e.g. night classes, telephone help).	72.1	83.0	73.3	67.1

## **APPENDIX B. EMPLOYER SURVEY FINDINGS**

To obtain information about entry level workers from another perspective, the evaluation team interviewed twenty employers of CTI graduates.

## **METHODS**

Employers were selected from the four focus sites, with names and phone numbers supplied by the CTI collaborative coordinator. There were approximately 45 employers on these lists; we interviewed the first 20 who responded to our calls and agreed to set up interview appointments. There were three refusals: at one facility, the interviewees declined after seeing the required consent forms, and two others stated they did not have the time. Most of the interviews were conducted at the site of employment, although five were telephone interviews. Interviews were conducted between January and March 2003.

### **Sample**

Table 31-B shows the distribution of responses by type and size of employer. Most were nursing homes, and most had between 100 and 500 employees.

**Table 31-B. Employer Survey Respondents**

Type of care	Number of employees				
	Less than 50	50-100	100-500	500-1000	1000+
Home care			1		
Nursing home care	2	1	9		
Hospital care					4
Other*		1	2		

\*Includes a day care facility, a healthcare worker employment agency, and a non-medical facility with a dementia unit

### **Questionnaire**

The questionnaire combined both open-ended and closed-ended questions, and focused on descriptions of the employer agency/hospital or home, advancement opportunities, worker training, hiring welfare recipients, tax incentives, worker compensation, and attitudes about the healthcare worker shortage.

Almost half of the respondents had not heard of the CTI program, although many were aware of new employees coming from the Workforce Investment Board that was running the CTI, and/or the CTI program training sites. Anticipating that few would know much about the program or its graduates, only two questions dealt with CTI specifically.

## **FINDINGS**

### **Worker hiring requirements**

Regarding requirements for entry-level workers, in addition to the CNA certificate required by nursing homes, most, but not all required references from applicants. Most also did their own background checks and health screening. Two employers conducted their own paper-and-pencil testing, with hiring contingent on a passing score. Only four stated that previous

experience was required, but several more stated a preference for those with experience. Two employers stated that they prefer no experience, because re-training was harder than training from scratch -- the workers are not yet “set in their ways.”

A few employers had “panel interviews” or interviews with several people over time, including the administrator, supervisors, and other caregivers, but extensive interviewing seemed to be the exception. Also exceptional was one employer who required a preliminary general two-day training session where potential employees receive information about aging, Activities of Daily Living, cultural competence. This is followed by another facility-specific three-day training where new employees shadow other staff. Then they are tested on the training session, and are hired if they pass the test. Only one other employer administered their own tests for which scores indicated whether an employee could work in certain specialty areas, but they did not require training prior to the test.

### **Recruitment methods and incentives**

We asked employers how they recruited new employees, and more specifically, how they found CNAs. For all workers, every employer used more than one approach. Over half of the interviewees mentioned having a connection with a local school. Some go to the schools where they make presentations, and some call the school to notify them of openings. One of the more aggressive recruiters stated, “We have so many partnerships, offer interview advice workshops, sit on advisory boards, and participate actively in local recruitment activities. We partner with \_\_\_\_ High School, a medical magnet school in [the city], and provide the clinical side for their summer CNA program.” Another frequent recruitment tool is word of mouth, and this is mostly employee referral. Several of the employers actively encourage this by offering bonuses to the referring employee. One said, “We let our people do the marketing.” Another stated that they haven’t needed to place ads for CNAs because they are mostly walk-ins and employee referrals.

Those who rely more on nurses rather than CNAs had to work harder to recruit compared with those hiring mostly CNAs or home care workers. Two employers mentioned recruiting nurses from other countries, including the Philippines, and two mentioned recruiting from other states, Mississippi, Alabama, Florida, and Oklahoma. At one facility, four of twenty LVNs were Filipina.

For CNAs, we asked employers what the three most successful recruitment methods were. The responses were newspaper ads (11), school/program referrals (9), employee referrals (8), walk-in applicants (8), in-house promotions (7), EDD-WIB sites (4), and the Internet (1).

Regarding **incentives** to bring in new employees, these too were varied in scope and intensity. Some stated that they did not have any incentives, other than their higher salaries, or a good benefits package, or a tuition payback program. The majority of respondents used some kind of incentive. We asked employers about the items listed in the table below.



**Table 32-B. Incentives Used by Employers**

Type of incentive	Number using
Signing bonuses, ranging from \$250 for CNAs to \$5,000 for LVNs and RNs	9
Vacation bonuses—only one home care agency did not offer vacation	19
Raises after working a specified time period (usually 3 to 12 months)	7
Training opportunities	12
Advancement opportunities	7
Flexible scheduling	11
Other—employee bonuses for referring new workers (ranging from \$75 to \$600)	6

One employer stated that he did not like to use hiring bonuses because it encouraged “job hopping,” but others use it generously. The training opportunities item resulted in a range of responses (training efforts are elaborated upon in the next section of this report, and focus on on-site training). A number of employers offer tuition assistance, or tuition payback programs, and one respondent stated that “anyone who is smart takes advantage of it.” One unique “other” response was an agency that bought uniforms for the workers, t-shirts with the agency logo.

### **Advancement opportunities for entry-level workers**

#### ***Who uses them?***

When asked what proportion of low-wage workers took advantage of advancement opportunities, the responses ranged from 2% to 10%, with others stating “a few” or “very small.” One agency stated that 80% of its employees are in school, but the training is offered by outside programs, not the employer (in a number of cases LVN or RN students work on the side as CNAs). One company had an OJT program for CNAs paid for by the corporate parent, but this program stopped about a year ago; they already had enough CNAs, probably because they pay higher than average wages. At the 15 sites where those interviewed stated that they offer advancement opportunities, all low-wage workers are eligible.

#### ***Types of advancement opportunities***

In general, there are two kinds of advancement opportunities for these low-wage workers. The first require no training, or just very minimal training, and the second require some sort of training, usually supported by the employer.

Advancements requiring no training include moving to positions such as restorative nursing assistant (making about \$1 per hour more), recreational/social services work, and administrative positions such as clerical or business services, medical records, and front office work. In one hospital, CNAs who were selected on the basis of merit and desire could receive three months of on-the-job training and become OB-technicians. These positions allow them to “scrub” and pay \$14 to \$15 per hour. In one nursing home, a CNA became the home administrator, but this was “only one in fifteen years.”

Advancement with training seems to be more common. Some of the configurations are described below:

- One home offers OJT for CNAs with pay to new employees as well as current employees in housekeeping and dietary. Employees are interviewed and selected on the basis of their perceived potential.
- Five employers offer tuition reimbursement for any position, paid after training is complete. One employer will, if the person chooses to continue working while taking courses, offer an hourly increase and move the worker/student off the regular payroll to “per diem.” Another employer offers a tuition pay-back program, but the entire program must be completed before they pay. This pay-back, at a rate of up to but not exceeding \$300 per month until the debt is paid off, is offered to new and current employees alike. Elsewhere, tuition reimbursement is annual, and/or a flat rate, like \$1,200 to \$1,500, plus sometimes books and fees. Employers work to accommodate special scheduling needs.
- One hospital system is teaming with several colleges to train 520 new nurses by 2008 by offering paid time and benefits during school, scholarships, and provide release time for advanced nurses on staff to teach courses. All students will do clinical rotation in their facilities, receive other support, such as books, supplies, and uniforms, and have guaranteed employment in any system facility upon graduation.
- A large, closed-panel HMO, in conjunction with the local union, has created an extensive career ladder program. All employees are eligible and the program includes both clinical and administrative training, partnering with community colleges and adult schools in the area. The employee is paid to take the theory courses off site through a combination of grants. The employee pays nothing and is paid as a full time worker during training. For more advanced education (LVN, RN, MSN, Clinical Nurse Specialist, Nurse Practitioner, Clinical Lab Scientist, Pharmacist), there is a forgivable student loan program. The loans are competitive, based on essay and interviews, but include both employees and people from the community in the competition.

In addition to training that allows movement up the career ladder, most of the employers offer on-site training for State-required continuing education credits, particularly for the CNAs who are required to have 48 hours of CEU training every two years, with at least 12 each year. The larger employers have their own in-house staff trainer/developers or nurse educators who provide the training, and smaller facilities will bring in outside consultants or send workers out.

When we asked what kinds of skills were taught, we found a wide range of responses. They seemed to fall into three categories, focusing on: 1) more administrative and less clinical skills, such as policies and procedures, new laws, elder abuse, patients rights, dignity, 2) specific conditions, such as epilepsy and seizure management, mental impairment, tracheotomy care, and TB, and 3) more general clinical skills including infection control, CPR, lifting, and safety and mobility. In most cases the employee is able to pick and choose courses, but there are also courses required by the state.

### ***Why offered?***

When we asked why opportunities were offered, the most common response centered on the facility/agency's ability to remain competitive. As one employer stated, "There was no other answer. We recruit internationally, nationally and locally and it is not enough." For this employer, it was purely a return-on-investment business decision. Another stated that with these opportunities, there seemed to be a decrease in turnover among those advancing (even though the pay was only .50 per hour more). One employer's philosophy was that nourishing and providing opportunities for staff was the right thing to do, regardless of recruitment or retention benefits.

Thus, there are training opportunities for these healthcare workers, but they were mentioned by fewer than half of the interviewees. In most cases, the initiative must be taken by the worker who is experiencing the burdens of, for example, low wages, more than one job, and children at home.

### **Welfare-to-Work employees**

Many employers had a lot to say about Welfare-to-Work employees, with opinions ranging from the very negative to the very positive, at the same time acknowledging the negative pull of their unmet needs in the realms of childcare and transportation.

Fourteen of the 20 employers interviewed had hired WtW participants (but four were not sure). Most of these workers were hired as home care workers or CNAs, but in one case they were hired as "clerical, not patient care" workers. One employer said that they were mostly CNAs because the LVN students ended up quitting. When we asked how many new hires in the past year were from WtW, most respondents could not say how many. A couple stated that they hire whoever comes in, and one, who runs a home care agency, said that most of the agency employees are from the WtW program.

We asked employers if they took any specific steps to hire WtW employees, and many said that they do not actively recruit these workers. Oftentimes, however, these workers end up as caregivers for a number of reasons. First, some work closely with their local WIBs to recruit workers, and these WIBs and unemployment agencies bring in low-income people. Second, some of the welfare offices know about these healthcare opportunities, especially where they are closely linked with the local WIBs. In general then, these employers don't specifically scout out WtW individuals, but because the jobs are relatively low paying, a significant number of workers are probably from the WtW pools. Many employers stated that they don't care (and often don't know) about the welfare background, as long as the worker meets the other criteria.

### ***How they perform***

Half of the respondents stated that they did not know how well the WtW participants functioned in their jobs. Of the remaining ten, five said they were the same as other workers, one said they were better, and three said they were worse than other workers. One stated that half were the same, and half were worse.

Only a couple of employers had truly negative remarks about WtW workers. Some of the more negative comments were that they have "attitude problems, and problems dealing with

authority, respect,” “ they have no “soft skills,” they “need to have a commitment and not just a need for a job.” One of the most negative of the employers stated that this population was worse because “they know the system. They can get any thing out of the system where other people have to live an honest life.”

On the positive side, employers stated that most of the WtW workers want to help themselves, and they do it. However, they have problems with babysitters and problems with absenteeism. “They know they have limitations. They want to do well.”

Another employer states: “Some of them are the best employees. Once they work, say 90 days, especially with the good income, they do well.... They have the will and desire to go out and do well.” However, he states that there are often transportation problems, even though the employer pays half of their cab fare. Another respondent says that they are eager to perform but have “so much baggage”. In some cases, the employer notifies EDD, then there are child support garnishments, and then those owing child support leave.

One question in particular generated many thoughtful responses. The question was, “based on you experiences to date, do you have any suggestions about steps that the government or private sector could undertake to encourage businesses to hire welfare recipients and/or enhance their success within the workplace?”

Responses are categorized into the groupings of general attitudes about welfare recipients, training, childcare, transportation, and incentives to hire welfare recipients.

### **General attitudes about welfare recipients**

- *Caregivers do have huge hurdles- low wages, transportation problems, family problems (most caregivers have “at least” one family member with major health issues), a lot of single parents working two jobs. It’s overwhelming to think about.*
- *I think welfare recipients have a bad rap. When I hire people who haven’t worked for a while, I ask if they’re mothers. Mothers have nurturing skills, are multi-taskers, have organizational skills. Being a mom says a lot about a person. We need something to change the bad rap. I have had experience in “poor life skills” and lack of professionalism with people at all levels and from all backgrounds. We tend to focus on that image as being exclusive to people on welfare.*
- *We want to get them off welfare... I don’t think they know what they’re getting into. Several started and left soon. Three had attendance problems from the start and were fired. I think that their lives are a mess with babysitter problems and sick kids. What do you do? Most workers have compassion, but were excessively absent. The program needs to go another step, hire babysitters, etc. (paraphrased from the interview).*
- *For all positions, WtW are harder to train, and to keep. Different work ethic, no day care. Haven’t been in the work force for a long time.*
- *Unless they are ready to go into the work pool, there are issues with child support, housing transportation, childcare, family interrelationships.*
- *If a person is motivated and in the U.S., they can get ahead.*

### **Training**

- *Education and training in the areas of enhanced communication skills, general literacy skills, cultural diversity awareness, managing conflict, and work skills on how to be a successful employee.*
- *The “life skills” courses offered by \_\_\_\_\_ are completely inadequate. The teachers don’t dress or behave professionally, so they are not good role models.*
- *We’ve had experiences with some welfare recipient applicants who need to have an interpreter present at the job interview and really don’t understand what they are applying for. W-t-W folks need more assistance in the process of applying for a job and need much more ESL.*
- *More second language classes would be a “biggie” but it’s hard to go to school at night. Some, not CNAs, like housekeepers cannot read or write.*
- *Needs to be a huge focus on sensitivity training. If they don’t have the innate skills needed [it won’t work]. These are very intimate situations.*
- *If they would provide money ...we could have training programs on the site. We’d be very interested in having an onsite LVN training program, but do not have enough resources.*
- *...need more soft skills training, need to learn to be professional. The State should offer job skills classes more often and maybe require WtW clients to work as volunteers to learn about the work environment and gain job skills.*

One respondent suggested that there could be an attitudinal problem, and that attitudes of employers need to be addressed prior to other approaches:

*Work on middle managers first, reduce their stress and turnover. Then they may have the willingness and ability to help new employees and those employees having trouble. Facility leadership needs to encourage managers to be supportive. It needs to be part of the organizational culture.*

### **Childcare**

- *One challenge [was that] a whole group of people, if they worked too many hours, they were disqualified for funds for childcare. It was devastating to the employer.*
- *The BIG concern is childcare. Some have two, three, or four kids, and get \$8 an hour, so they are working for nothing. (This employer had space, and tried to establish a cooperative-type childcare center at his home, but government regulations made it impossible; for example, they demanded one certified teacher for every two children.)*

### **Transportation**

- *Many of the workers travel some distance to get to work because this is one of the better facilities in Orange County. They will make the drive, but if they have car problems [they cannot get to work]. A small percent use public transportation, but it is difficult connecting, and there are no overnight buses. As they get to know people they can then ride share.*

- *The problem is that they really do want to work, and they will work for two weeks and then not show up. They can pass the training, but have problems keeping the job. They have problems with transportation, and many have no vehicles (from a home care agency).*

### **Incentives to hire welfare recipients**

- *We don't need to be "encouraged" to hire welfare recipients. If someone comes in with a valid CNA certificate and passes the interview and health screening, they get the job and we don't care about her/his welfare record.*
- *... try to hire as many as we can because we get the tax advantages, but any more we are getting very few.*
- *It seems like when the State gets involved in anything, it gets complicated.*
- *Right now, non-profits don't get a tax break by hiring welfare recipients, so we have no incentive to hire or track employees coming off of welfare.*
- *What I'd like to see is a 50/50 program where we would pay 50% for the first 3 months, and the government pays 50%. It would be beneficial for both sides, and provide incentives. Good for the smaller "mom and pop" homes. Cheap is not always the best.*
- *If they want people to work they [should pay more].*

### **Tax credits**

We asked respondents about the Earned Income Tax Credit (EITC), and whether any of their employees used them. Many were familiar with EITC, but most did not know whether they were used or not, since they are usually requested by the individual and not by the employer. (If the employee wants the tax credit added to his/her monthly paycheck, rather than an annual lump sum tax return, the employer has to complete the paperwork, but very few do this.) One employer said that they just learned about EITC, but "the paperwork looks horrendous and I'm not sure any of our employees would qualify because the income levels are so low and we are a union shop."

### **Quality of workers**

Those who were aware of the CTI program spoke very highly of it, especially in terms of its contribution to the labor market. One respondent stated she was "kind of bummed that the program is ending" since it was a rich source of employees. One employer told us that because they were a CTI training site:

*...we were able to get the cream of the crop. The Director of Nursing would observe classes and the trainees, and make suggestions which would then be incorporated into the instruction. We have gotten for the most part good skills and good attitudes among the CTI grads, similar or better than other CNA hires. We still have lost about 30% of them due to poor life skills, but that's about the same as other CNAs. When you look at their resumes, they look like gypsies, floating from one job to the next.*

Another stated that from 16 hired, four have been terminated, which is about the same or better than other [non-CTI trained] CNAs. ... The supervisor writes "abandonment of job" on just

about every termination, and the respondent does not know what that means since the facility does not do exit interviews. Another employer said that the CTI graduates are mostly ethnic minorities, Hispanic or Vietnamese, so they add to staff diversity, which is good, despite some communication difficulties in spoken language and in charting. One employer described problems due to absences, but not from negative performance.

### **Worker compensation claims**

Sixteen employers stated that there was at least one worker compensation claim filed in the past year. The number of claims ranged from one to 15. When we asked how many days were lost, on average, the range was remarkable. While several hovered around 10 or 12 days, others talked about 90 days (for one person), “a couple for several months,” one person for one and a half years. One stated “pretty high” while another stated “not many.” One site told us that they have a low accident rate, because they are a small place with good supervision, and “we work with them on the right way to do things.” Also, if there is no accident for several months, there is a safety lottery drawing for a hundred dollars. Several employers felt that because their employees got special training in safety, claims were minimal.

At one hospital we heard about a “lift team,” an on-call group of body builders who receive basic training in body mechanics and do all the heavy lifting for nursing staff. This has reduced the worker compensation claims to zero. The nurses are very pleased with the arrangement, both because of the assistance they give and because the men are “hunks!” While this facility does not require members of the lift team to have any health care training, another facility using a lift team requires team members to be CNAs.

The cause of the claims were mostly back and shoulder injuries, along with other strains and sprains, like arm, wrist and ankle. One mentioned bites and scratches, and a couple mentioned problems with fraud, where, for example, a worker was injured in a taxi, but there was “no dent on the car.” All but one respondent stated that none of the claims were due to workplace violence; there are reports of aggressive behavior, but none resulting in worker comp claims. In one case, there was “maybe one in the past year” where a worker had her hair pulled and hurt her neck.

### **Impact of Alzheimer’s disease**

#### ***How difficult?***

We asked how difficult employees find working with patients with Alzheimer’s disease and other mental disorders. Twelve of the twenty (60%) stated that they thought employees found them more difficult, five stated they found them about the same, and one thought they would find them easier because “they [workers] really don’t have the skills of interaction and language needed for those who can converse with them” (two were not applicable responses). Those who stated no difference in caring for mental disorders said that, “they’re just different. They are easier in some ways, for example, they are usually quite physically healthy. They walk around frantically, eat pretty well. They can last for years and years without medication or ambulation assistance. But they do need to be managed more creatively.” One of the hospitals discussed its psych unit, where “the staff members [there] love their work and their patients” but

they couldn't compare them with non-psych patients because they don't have any. Another stated that when patients get to the combative or wandering stages where they cause more difficulty, they are moved out to a special facility.

Again, special training, and other supports like having a behaviorist as a consultant on the staff, are mentioned as ways of making the job easier and more manageable.

Almost all of the cases were due to older, rather than younger patients, and this is no doubt a reflection of the patient mix.

### **Perceptions on the worker shortage**

When respondents were queried about the severity of the shortage now, and the future of the shortage, the answers are fairly balanced between better and worse. When asked, "What is your opinion of the shortage of health care workers compared to a year ago?" eight said better, seven said worse, and five said the same. When asked "What do you think the situation will be 12 months from now?" six said much or a little better, six said much or somewhat worse, and seven said the same. There seem to be differences by area, and by type of facility. In many cases, worker shortages diminish with higher salaries. We heard, for example, from more than one nursing home that they had problems with CNAs who would be lured away by the higher salaries at the hospitals. There seemed to be some consensus that finding CNAs was not nearly as difficult as finding higher skilled nurses (See Table 33-B).

**Table 33-B. How Difficult is it for Employers to Find...**

	<u>Not at all</u>	<u>Somewhat</u>	<u>Quite a bit</u>	<u>Very</u>	<u>NA</u>
CNAs	9	7	2	2	2
LVNs	2	5	4	7	
RNs	1	1	3	12	3

Vacancy rates for CNAs varied among the interviewed sites. Respondents mentioned much variation within sites as well, from year to year. For those who knew vacancy rates, most reported vacancies between 3% and 7%. One agency had just received a new contract, and was trying to hire 50 new CNAs, on top of their usual 80. Four of the respondents reported no openings for CNAs.

When we asked about turnover rates, or the proportion of CNAs who left in the past year, responses ranged from zero to one percent (three responses) to as high as 70%. Half of those who responded cited turnover rates in the 25-40% range, and two were in the 15% to 20% range. Two employers simply stated, "high." Because of the small sample size, and because six respondents did not know turnover rates, it was not possible to link wages with turnover. Several employers mentioned the fact that it was not that difficult to find new workers, but it was difficult to retain them.



## SUMMARY

The employer interviewers were very enlightening to the evaluation team, although findings were not surprising. Key findings are summarized below:

- Regarding employee incentives, some respondents described a wide range of opportunities for the employers, whereas others offered virtually no incentives.
- Training opportunities ranged from the bare minimum required (e.g., nursing homes offering CEU courses) to strong support and encouragement in the form of financial tuition reimbursements.
- Disparities in workplace opportunities could be attributed to the range in the size and the makeup of the employers interviewed.
- Employers' perceptions on the worker shortage did not seem to be consistent. Half the employers felt that the healthcare worker shortage was better than a year ago, and half felt it was worse.
- In terms of finding workers, most did not seem to have difficulty hiring CNAs, though retention was a problem. Almost all agreed that the shortage of RNs and LVNs was serious.
- Employers did not perceive that the presence of Alzheimer's and other mental diseases caused higher turnover rates.
- Most of the employers knew about tax credits, but few used them because they were not eligible and/or because there was too much paperwork involved.
- Most employers were happy to hire WtW clients, and were often happy with the quality of work. However, most mentioned that they had problems with childcare and with transportation, and that they could benefit with more training in areas such as soft skill development. They did not give more leeway to WtW workers.
- Surprisingly, the interviewed employers did not know the reason for employees quitting.

## **APPENDIX C. CTI PROGRAM COORDINATORS' SURVEY**

In late 2002, the evaluation team surveyed each site and asked key CTI staff people general questions about the program. This is an important element of the evaluation, given that these people are on the front lines, and working every day with the program and its participants. They, better than anybody, are aware of any hitches in the program and areas where improvement would be desirable and possible.

At the All-Site meeting in Sacramento, October 2002, we handed out the questionnaires, one per site, with four open-ended questions. We followed this with an email to each site, and then an email several weeks later to those sites not responding. We received responses from seven of the twelve sites.

Some recurring themes emerged from several collaboratives. These pertained mostly to the timing of the grant, and the large amounts of required paperwork. Many commented that they felt the program was much too rushed initially, and not long enough to accomplish what they wanted.

Respondents were frank, thoughtful, and interesting. The responses are summarized topically below.

#### **WHAT THE COLLABORATIVE WOULD DO DIFFERENTLY**

The first question asked what the collaborative would do differently, if the CTI program were repeated, given the advantage of hindsight.

##### Timing

The time frame of the project was a major issue, and was mentioned to the evaluation team on a regular basis. Many collaborative administrators felt that they were rushed in setting up the CTI program, and that the program was too brief.

*“The late start of contracting between the announced start date, and the actual start date (meaning an executed contract with the State and sub-contractors) proved to be a hindrance in starting and finishing programs. Having more lead-time between awards, contracting, and program start-up would have contributed more success to an already successful program.”*

*Better planning on the front end. The State has a very slow, start-up process, and this negatively affected the smaller nonprofit partners involved in the project. Likewise, the State then mandated that we spend the money at a rapid pace. Same issues with partners, thus, not having the ability to incur costs at such a rapid pace.*

There were also issues with the timing of the contracted educational programs. These focused on the fact that training programs started only on a semester or quarterly basis, and that in cases where people needed pre-requisites that took longer than the program’s short-term allowed.

*“Most of the training programs operated within a semester or quarter program at the community colleges. This in turn did not match well with the timing of the grant. Students who would have otherwise been eligible could not take advantage of CTI training due to the training cycles of the various programs.”*

*“Pre-requisites in some cases could not be completed concurrently with CTI training. This prevented many individuals from entering and completing training within the time frame of the grant. It was suggested that the grant time should be at least two – three years in order to get people prepared for training, and then through training within the time frame of the grant.”*

### Training

A couple sites wished they had started some things earlier, like focusing on recruiting WtW clients earlier, or starting OJT training earlier in order to set up more OJTs. One site encountered a problem with the training provider, saying that if they were to repeat the CTI they would:

*...establish more clearly-defined goals and outcomes for training providers and partner sites. We had one experience with a training provider where their outcomes expectation was different than ours. Their thought was that participants trained would be retained as employees, where our... expectation was to have a trained participant who could work anywhere.*

A couple of sites mentioned doing more with LVNs:

*“We would focus more on the higher skilled occupations, such as LVN and RN candidates. While they cost much more per person, on the average, the success rate is much higher and seems a better way to expend limited funding.*

*“I would have planned for more CNA & LVN enrollments. The LVN course was a big hit!*

And one site wished that it could have focused less on the WtW population:

*“Welfare recipients are not a great population to target for training for these types of occupations. The lack of work maturity skills, and inability to complete even a short six week training program by more than half of the welfare clients that were enrolled tells us that we are better off focusing our efforts for CNA training on a work ready population that is seeking ... a means to an end of a better paying job (e.g., working as a CNA while going to school to obtain an LVN or RN license).*

### Administration

Although two administrative items were mentioned only once, they seem to have some merit. After the fact, the site realized the importance of regular, continuing meetings with the CTI collaborators, and the importance of budgeting enough money for supportive services.

*Planning meetings at the local level occurred regularly in the beginning and then tapered off once the program began. Hindsight suggests that these meetings should have continued throughout the program to ensure that communication channels remained open, and ultimately increase the success of the grant.*

*Reduce incentives to employers. Increase budget for support services necessary for participants to complete training and retain employment.*

## **WHAT WAS UNEXPECTED ABOUT THE PROGRAM**

The second question asked what was surprising or unexpected about the program. In general, sites did not expect that the program would be as difficult to run, nor did they anticipate the difficulties that arose working with partners and training providers. Only one site mentioned the merits of building a sustainable coalition. More positively, sites were surprised at the positive response and level of commitment from the participants.

### Level of difficulty

*Personally, having not done this before, if it had not been for a supportive supervisor I would have had a great deal of difficulty in running the program. I strongly believe in the intent of this grant. I know that we were extremely successful in what we accomplished with the number of students that we were able to put through training.*

*There seemed to be unanticipated difficulty in getting participants to complete required paperwork, and then keeping their case manager informed of difficulties, challenges, or changes.*

### Cost

*...the high cost of trying to run programs in rural areas.*

### Working with the local colleges and others

*... how difficult it is to work with Community Colleges. In many of our areas ... the local Community College had a program in place for LVN or RN training, but the waiting list ... was 12-18 months long. In spite of being offered additional funding to open up more programs, or to create new ones...some ... were disinterested and refused to consider such an option... We tried to overcome this problem by contacting Community Colleges in other areas ... but were told they cannot encroach on another's territory...*

*I was extremely pleased working with the various training providers in our area. I learned a great deal from them and am grateful for the relationships that have been established as a result of this project. I was disappointed in what I view is a lack of support from the Nursing Administrative Staff in my county. They say that they need nurses, but when it comes to getting them to participate and make a commitment of some sort we did not see the cooperation.*

*We were able to build some strong coalitions through this grant that will be sustainable beyond this grant.*

#### WtW Participants

*I was surprised at the difficulty of recruiting WtW participants.*

*It was difficult at first to identify WtW clients that qualified for services, and who did not have some barrier to entering the industry.*

#### All participants

Several sites commented positively about the quantity and quality of the participants overall. *...the commitment of the customers. A lot were employed (i.e., under-employed) and still display a lot of commitment to the program.*

*It was a pleasant surprise that through shared resources, creativity, and hard work, we were able to exceed our goal of participants served by over 50%.*

*The success our region had in recruiting applicants for the program. We were able to exceed our planned enrollment goals by approximately 25%.*

### **RECOMMENDATIONS TO THE STATE**

#### Paperwork

Many respondents mentioned paperwork that they felt was excessive and burdensome.

*Do not require the additional paperwork and evaluation of special projects such as these. Current performance standards and reporting requirements under WIA are enough. There are a lot of issues... that come up during the implementation of special programs, and most local areas are able to modify any on-going effort to correct deficiencies and capitalize on strengths.*

*,the use of two funding sources unduly burdened our subcontractors.....who complained that they were obliged to spend too much time dealing with paperwork rather than serving participants.*

*The amount of paperwork required of our collaborative, in conjunction with the special study being conducted by UCLA/UCSF, was overwhelming for our staff, students and training providers.*

*Streamline the reporting process and the amount of paperwork involved.*

#### Time frame

Many also mentioned not having enough time to get started, or to meet the program requirements. While most understand the reasons for the time frame, in an ideal world, they would like to see a more expansive time frame.

*The State's rhetoric about the severity of the caregiver workforce crisis was incommensurate with its time and funding commitment to confronting the crisis. If the State believes that there is a severe shortage of caregivers, then it should continue to fund projects like CTI, and increase the amount of funds allocated.*

*The grant calls for retention and tracking beyond the life of the grant, yet no funds are allocated for this. We are still trying to figure out exactly how we will accomplish this.*

*Be realistic in your expectations for reporting. Don't forget the lag time involved with JTA.*

*Start your programs on time.*

*Don't rush a project. When it is ready, then start. Work the bugs out first.*

#### Administration

Many of the recommendations to the State that the CTI administrators suggested reflected their frustration with administering a neophyte program that was trying to adapt and accommodate as it progressed and as questions arose. Sites suggested that the State "have a well thought out plan and procedure for accomplishing the plan from the start," that they "have their ducks in a row," that the "rules set forth apply to everyone," and that the Regional Advisors are trained so that "everyone is giving the same answer." Some specific problem areas pertained to participant eligibility, acceptable training programs, and working with the JTA system.

*... it took a long time for the State to formally agree that the WIA income guidelines were waived under CTI."*

*The limitations ...on the types of health careers... changed after the proposals were already submitted. There were some non-patient care related positions for Medical Record Coders that I would have personally like to have addressed. Also, Laboratory Technicians is a key profession currently being addressed by some Workforce Investment Areas.*

*The expectations of results by the State were not realistic in working with the JTA system and its capabilities. Turnaround information is very slow forthcoming and then trying to report it to you for inclusion in your study was difficult. In most cases a separate tracking system had to be established to keep track in "real time" the number of students in the program at any given notice.*

#### The future

Several respondents had ideas about potential programs the State should (and should not) fund.

*CTI and NWI are only going to scratch the surface of the nursing shortage in the State. We would like the State to continue focusing resources on this*

*occupation. However, timing of this focus is critical. Programs should overlap in order to take full advantage of agencies and programs in progress. It is disruptive to continuity to have one program end before the other one begins. Even though sustainability is a common goal beyond the funding of the grant, in actuality some programs can only exist on grant funds.*

*The new trend in health care training appears to be with RN training. Don't forget about CNAs. We should do more to develop career ladders.*

*In the future, the State should wait for evaluation of the program before making a decision to defund successful regional collaboratives and fund a statewide association with no track record of recruiting, training, and retaining healthcare workers.*

## **UNDER-UTILIZATION OF CERTAIN PROGRAM COMPONENTS**

Some important features of this program were mentioned repeatedly in the original collaboratives' proposals, but did not seem to come to fruition. We asked the sites about their perceptions of why distance learning, on the job training and mentoring were not used more consistently. For the most part, sites discussed the costs affiliated with these programs. But probably more important, none of these programs are amenable to any quick and easy jump-starts. Mounting these would be even more costly and time-consuming than running them. In spite of the costs, one rural program in particular thought that distance learning would continue to grow; several, however, felt that it was not appropriate for the population.

### **Distance learning**

*Distance learning did not turn out to be practicable, except in the instances of a few prerequisite courses. Even if the classroom portion of the training was available via distance learning, it did not solve the problem of clinical work that had to be done in an approved facility."*

*...startup costs for distance-learning programs are high.*

*...distance-learning may have been under-utilized because of the time needed to arrange it, which would involve issues of logistics, infrastructure, and partnering that are not easily nor quickly resolved.*

*...not conducive for our population. Disadvantaged participants have difficulties with technology, have time constraints and have more appreciation for teachers and a classroom setting.*

*Distance learning was determined to be not appropriate for the majority of trainees, and difficult to administer to others due to curriculum management, access to services, and a basic understanding of operations.*



*...in nursing with the direct patient care component you need to be with your fellow students and instructors. [Also], you are working as a team and in order to develop that component you have to have your students together. ...The cost for setting up labs at the satellite locations is expensive.... It is new and different, but not impossible. Start small and then expand the program as your knowledge and experience grows.*

### Mentoring

*Mentoring was built into the original plan by partner agencies, but as the project progressed mentoring was actually accomplished by the teaching faculty that had the greatest access to the students.*

*Mentoring was a big problem in our ... areas because many of the individuals that would be appropriate “mentors” were too busy to become involved.” (One site did get an offer to provide mentoring services through a national nurse’s association, but the cost would have been prohibitive, around \$100,000.)*

*I feel that mentoring should be an existing part of all programs... Unfortunately, in our society people are stretched to the brim and no one wants to mentor out of the goodness of their heart. Everyone wants to be compensated financially.*

### On-the-job training

Two sites mentioned the high demand for CNAs having a negative impact on potential OJT programs, and one site felt that the training sites were too overloaded:

*We thought, originally, that we might have to entice some of local employers with an offer of OJT for the lower skilled occupations, such as CNAs. In reality, the demand is so high that our local employers were pretty much willing to take anyone, as is, if they made it through the training and certification period. It was a creative idea, but ...not necessary. [Also]... it would be much more expensive, per person, to train someone as a CNA through an OJT than to provide financial assistance with established training programs through ROPs, Community Colleges, and Adult Schools.*

*We didn’t see how OJT training could really fit under CTI. Our goal was to train people for careers in health care. The professions in which we were training individuals were all in high demand and the students that wanted to find employment were immediately hired upon graduation, some even before completion.*

*OJT was determined to be inappropriate for most trainees due to constraints [and strained resources] at the training sites.*

The one site mentioned that it used OJT, was very happy with it, and considered it a successful activity.

## SUMMARY

In summary, the collaboratives responding to our questions were in agreement on a number of points. **While many may sound negative, it should be emphasized that most of the questions were worded to elicit responses focused on improving the program.**

- Most of the respondents felt that between the State's demands and the requests of the evaluation team, there was too much paperwork required.
- Many felt frustrated by the time restrictions of the CTI program, including the rushed startup time and the overall short time of the program, given that some of the trainees were in 12-18 month training programs, and that many of the trainees needed pre-requisite classes.
- The programs were more difficult to administer than anticipated. Some of the challenges related to the necessary inclusion of WtW participants, working with colleges and other training programs that had their own schedules and priorities, not all of which were to expand their healthcare programs.
- Respondents commented on a lack of clear direction from the State, initially, particularly concerning eligibility criteria, and the focus of training. There seemed to be a perception of different rules for different people stemming from a lack of coordination.
- Several respondents commented positively about the participants. They felt that they were committed to the program, and were pleased that they exceeded their anticipated recruitment figures. There seemed to be agreement that qualified WtW participants were harder to recruit and train.

## **APPENDIX D. CTI PROGRAM EARLY DEPARTURES (DROPOUTS)**

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**Table 34-D. Early Departure Surveys, by Site**

<b>SITE</b>	<b>Names</b>	
	<b>Received</b>	<b>Interviewed</b>
Long Beach	33	18
Kern	55	26
North Bay	16	9
NoRTEC	0	0
Riverside	7	3
Sacramento	89	28
San Diego	8	6
San Francisco	12	5
San Jose	3	1
SELACO	0	0
Ventura	3	2
West Hills	0	0
<b>TOTAL</b>	<b>226</b>	<b>98</b>

Source: CTI Early Departure Survey, 2002.

**Table 35-D. Dropouts' Perspectives**

<u>Reasons for not taking part in the program*</u>	<u>%</u>
Found a job/decided to work	18.2
Couldn't afford to be in the training program	14.1
Didn't have the time	26.3
Not interested in home care or health care	7.1
Needed more help with childcare	12.1
Had family or personal problems	31.3
Had scheduling problems	21.2
Found the training program to be too stressful	6.1
Were injured or became ill	11.1
Had language problems	3.0
Had problems with transportation	12.1
Others	19.2
<u>Reasons for not finishing the program (N=65)</u>	
Did not like the classes	1.5
Did not like the patient-care work	9.2
Found the classes to be too hard	9.2
Did not have the time for the homework	15.4
Did not like the instructor	6.2
Wanted to be in a different kind of program	1.5
Other	9.2
Too much work	1.5
<u>What would help you stay in the program? (N=50)</u>	<u>%</u>
Nothing	2.0
More on-the-job training	6.0
Less time in the classroom	6.0
Less demanding/fewer or shorter classes	6.0
More money for participants	30.0
More help with personal problems like childcare	20.0
More help with transportation	10.0
More tutoring help with course work	14.0
Classes and/or training closer to your home	16.0
More interesting classes	4.0
Better prepared instructors	10.0
Different scheduling	28.0
More flexibility with absences and timing	8.0
More help with studying (study group)	4.0
Other	20.0

Source: CTI Early Departure Survey, 2002.

\*Note: Categories are not mutually exclusive.

*Relationship between healthcare experience and future plans*

Table 36-D below shows the relationship between those who say they plan to be working in health care in 6 months with those who had worked in a healthcare setting sometime in the

past two years. A total of 54 individuals, or 55.1% of the sample said that they plan to continue working in health care, while 19 more, or 19.4%, said maybe they would work in health care. Since some people had worked in more than one setting, we merged the data (last two rows) to compare those who had worked in any healthcare setting with those who had not. Of the 51 people with prior experience, 7 were not planning to continue working in health care. Of the 48 people without experience, 18 were not planning to continue working in health care. This analysis of the Early Departure Survey responses indicates that those dropping out of the program are more likely to remain in the health care field if they had prior healthcare experience.

**Table 36-D. Relationship between Future Health Care Job Plans and Previous Work in Health Care**

<u>Healthcare job in next 6 months?*</u>		YES n=54	NO n=25	MAYBE n=19	TOTAL
<u>Worked before in...*</u>	Hospital?	11	2	1	14
	Nursing home?	14	3	1	18
	Residential care?	20	0	2	22
	Home care?	23	3	4	30
	Any of the above?	39	7	5	51

Source: CTI Early Departure Survey, 2002.

\*Responses are reported in numbers, due to small sample size.

**Table 37-D. Profiles of Dropouts, from WIA Database**

	All CTI Participant	Non- Dropout	All Dropouts	Dropouts Survey Group
<u>Number</u>	<u>5,816</u>	<u>5,151</u>	<u>665</u>	<u>103</u>
% Female	88.2%	88.3%	87.7%	89.3%
<u>Ethnicity</u>				
African American	18.4%	17.7%	24.2%	35.9%
Asian/Pacific Islander	14.7%	15.2%	10.8%	7.8%
Hispanic	30.7%	31.0%	28.6%	16.5%
Non-Hispanic White	30.5%	30.7%	28.9%	32.0%
Other	5.7%	5.5%	7.5%	7.8%
<u>Age</u>				
Under 21	18.6%	18.0%	23.3%	19.4%
21 to 30	33.0%	32.9%	33.2%	38.8%
31 to 40	23.3%	23.1%	24.8%	24.3%
41 to 50	16.6%	17.0%	13.1%	12.6%
Over 50	8.6%	9.0%	5.6%	4.9%
Mean/Median	32.2/30.0	32.5/30.0	30.2/28.0	30.0/28.0
<u>Educational Attainment</u>				
Less Than High School	23.9%	23.5%	27.1%	27.2%
High School Grade / GED	51.2%	51.0%	53.1%	62.1%
Post High School Education	19.1%	19.4%	17.0%	6.8%
College Graduate	5.8%	6.1%	2.9%	3.9%
<u>Number of Dependents</u>				
Zero	39.3%	39.4%	39.0%	52.4%
One	23.4%	23.4%	23.0%	10.7%
Two	21.1%	21.2%	20.2%	18.5%
Three or more	16.2%	16.0%	17.9%	18.5%
Mean/Median	1.2/1.0	1.2/1.0	1.3/1.0	1.1/0.0
Pct. Non-Citizen	15.1%	15.7%	9.9%	13.6%
Pct. Limited English Speaker	11.0%	11.5%	7.2%	0.0%

Source: WIA and WtW enrollment data, 2001-2002.

**Table 38-D. Welfare History, Site, and Training Status of Dropouts**

	All CTI Participant	Non- Dropout	All Dropouts	Dropouts Surveyed
Ever Received Welfare (1987-2001)	51.8%	50.6%	60.6%	61.2%
Ever Received Welfare (2000-2001)	30.4%	29.4%	38.5%	38.8%
Received Welfare at Intake	23.4%	22.6%	29.3%	30.1%
<u>Months on Welfare (1998-2001)</u>				
None	63.5%	64.7%	54.1%	58.3%
1 to 12	11.3%	11.1%	13.5%	6.8%
13 to 24	8.4%	8.1%	10.8%	4.9%
25 to 36	7.7%	7.3%	10.7%	14.6%
37 to 48	9.1%	8.8%	10.8%	15.5%
Mean/Median	8.7/0.0	8.4/0.0	10.9/0.0	13.0/0.0
<u>Training Site</u>				
Kern	10.0%	10.5%	5.9%	21.4%
Long Beach	9.0%	10.1%	0.9%	0.0%
NORTEC	15.0%	14.9%	16.4%	0.0%
North Bay	4.8%	5.2%	1.7%	2.9%
Riverside	6.5%	6.8%	3.9%	7.8%
SELACO	5.8%	6.5%	0.0%	0.0%
SETA	9.1%	8.0%	17.9%	53.4%
San Diego	6.9%	6.9%	7.2%	2.9%
San Francisco	6.0%	6.5%	2.1%	5.8%
San Jose	7.5%	7.1%	10.2%	0.0%
Ventura	1.5%	1.5%	1.5%	3.9%
West Hills	17.9%	16.0%	32.3%	1.9%
<u>Type of Training</u>				
CNA/HHA	31.4%	31.9%	27.2%	69.9%
IHSS	3.1%	3.4%	0.8%	0.0%
LVN/RN	7.1%	7.1%	6.6%	13.6%
Other	9.6%	8.4%	19.1%	3.9%
Unknown	48.8%	49.2%	46.3%	12.6%

Source: WIA and WtW enrollment data, 2001-2002; CTI Baseline Information Form, 2001-2002; MEDS, DHS, 1987-2001.



**Table 39-D. Demographic Profile of CTI Dropouts, from Baseline Data**

	All CTI Participant	Non- Dropout	All Dropouts	Dropouts Surveyed
<u>Number with Baseline Data</u>	<u>4,133</u>	<u>3,668</u>	<u>465</u>	<u>102</u>
<u>Marital Status (%):</u>				
Married	29.7%	30.3%	24.5%	19.6%
Separated	9.5%	9.4%	10.3%	8.8%
Divorced	12.3%	12.6%	9.9%	10.8%
Widowed	1.8%	1.8%	1.7%	0.0%
Never Married	41.9%	41.0%	49.0%	52.9%
Ref/Unknown	4.9%	4.9%	4.5%	7.8%
<u>Children Living with You (% Yes)</u>	64.2%	64.4%	62.4%	50.0%
(if yes) Mean number under 5	0.8	0.7	0.8	0.8
(if yes) Mean number 5-17	1.2	1.2	1.3	1.4
<u>Regularly Care for Someone (% Yes)</u>	31.1%	32.0%	24.1%	23.5%
(if yes) Are you paid (% Yes)	52.4%	53.4%	42.0%	37.5%
(if yes) Is it a relative (% Yes)	36.1%	35.7%	41.1%	37.5%
Worked Last Week (% Yes)	42.2%	43.5%	32.3%	33.3%
Worked in Past Year (% Yes)	59.0%	60.5%	46.9%	50.0%
Health-Care Related Job in Past Year (% Yes)	32.1%	33.1%	23.7%	27.5%
(if no) Health-care job ever (% Yes)	18.2%	18.2%	18.4%	17.4%
Previous Training in Health Care (% Yes)	36.5%	37.0%	33.1%	27.5%
Other Adults in Home Work Full-Time (% Yes)	37.6%	38.1%	33.8%	31.4%
Other Adults in Home Work Part-Time (% Yes)	10.2%	10.3%	9.3%	11.8%
Own a Car (% Yes)	62.7%	64.1%	51.4%	52.9%
<u>How Heard About the Program (%):</u>				
Newspaper ads	6.9%	6.7%	8.3%	12.8%
Bulletin boards/posters	2.8%	2.7%	4.0%	1.0%
Newsletter/mailling	3.8%	3.9%	3.4%	4.9%
County worker	14.8%	15.3%	11.2%	8.8%
Someone else	27.6%	26.7%	34.8%	33.3%
TV/radio	1.4%	1.5%	0.7%	1.0%
Brochures	4.8%	4.6%	6.3%	7.8%
Job fair	0.8%	0.8%	0.0%	1.0%
Web-site	0.2%	0.2%	0.5%	1.0%
School	2.4%	2.6%	0.9%	1.0%
Career Center	1.2%	1.3%	0.2%	0.0%
Employer/At Work	0.4%	0.4%	0.0%	0.0%

Union	0.9%	0.9%	0.5%	0.0%
Other	32.0%	32.4%	29.4%	27.5%

Source: WIA and WtW enrollment data, 2001-2002; CTI Baseline Information Form, 2001-2002.

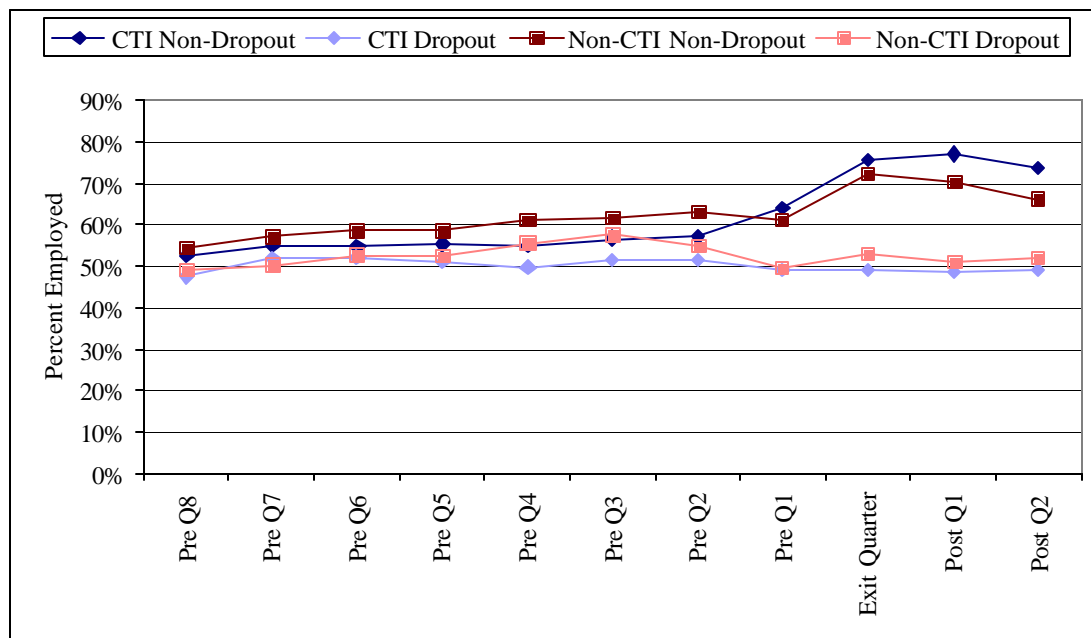
**Table 40-D. Employment History for CTI Participants and WIA/WtW Comparison Group Dropouts, 1999 through 2000**

	CTI Non- Dropout	CTI Dropout	Non-CTI Non- Dropout	Non-CTI Dropout
<u>Number</u>	<u>5,151</u>	<u>665</u>	<u>13,249</u>	<u>1,557</u>
Percent Ever Employed	78.3%	78.1%	81.9%	80.3%
<u># of Quarters Employed</u>				
1 to 2	16.2%	21.2%	16.2%	24.1%
3 to 6	35.7%	37.6%	32.7%	47.4%
7 to 8	48.2%	41.2%	51.2%	28.5%
Mean	5.6	5.1	5.7	4.7
Median	6.0	5.0	7.0	5.0
<u># of Employers</u>				
One	7.3%	9.4%	7.5%	10.4%
Two	6.8%	9.6%	6.9%	10.7%
Three	6.4%	9.8%	6.3%	8.8%
Four or more	79.4%	71.1%	79.4%	70.1%
Mean	7.3	6.8	7.1	6.1
Median	8.0	7.0	8.0	6.0
<u># of Quarters with Same Employer</u>				
1 to 2	27.3%	38.5%	27.8%	41.8%
3 to 6	45.9%	41.0%	43.9%	47.1%
7 to 8	26.8%	20.4%	28.3%	11.1%
Mean	4.5	3.8	4.5	3.4
Median	4.0	3.0	4.0	3.0
<u>Mean Annual Earnings (in 2003 \$)</u>				
1999	\$10,127	\$8,446	\$15,898	\$6,410
2000	\$11,595	\$9,683	\$17,805	\$6,944
<u>Median Annual Earnings (in 2003 \$)</u>				
1999	\$6,336	\$3,406	\$8,615	\$3,136
2000	\$7,993	\$5,272	\$10,443	\$4,029
<u># of Quarters Employed in Health Services</u>				
Zero	68.3%	67.4%	87.8%	85.8%
1 to 2	10.3%	10.4%	6.0%	8.3%
3 to 6	10.0%	11.4%	4.0%	4.5%
7 to 8	11.5%	10.8%	2.2%	1.4%
Mean	1.5	1.5	0.4	0.4
Median	0.0	0.0	0.0	0.0
<u># of Qtrs with Same Health Services Employer</u>				

1 to 2	36.8%	38.5%	54.1%	61.8%
3 to 6	34.6%	33.1%	32.9%	30.3%
7 to 8	28.6%	28.4%	12.9%	7.9%
Mean	4.2	4.1	3.1	2.7
Median	4.0	3.0	2.0	2.0

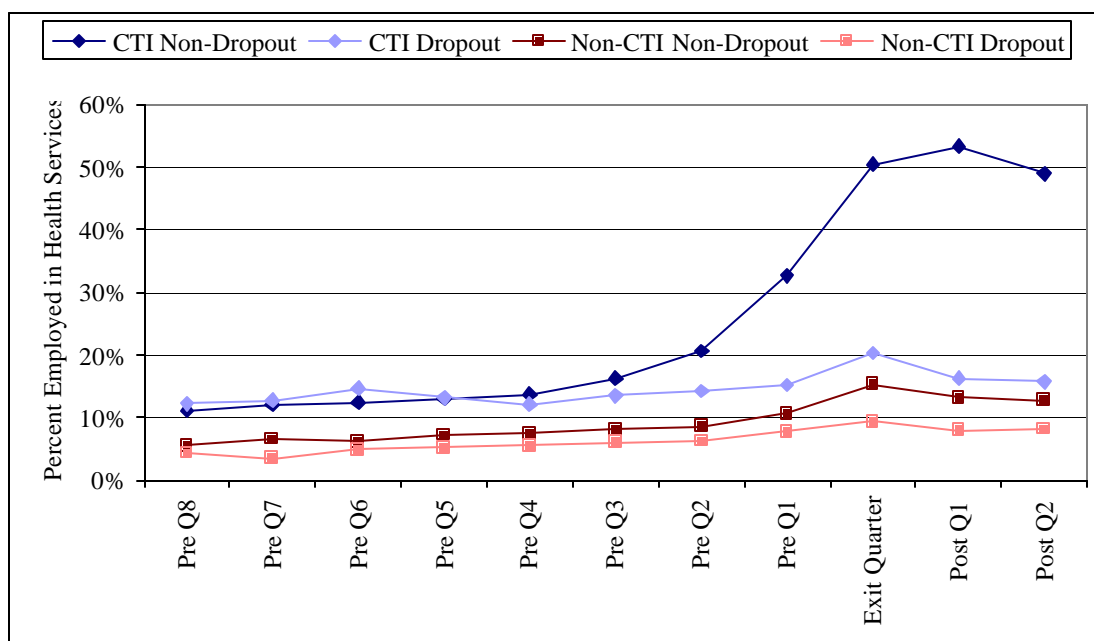
Source: WIA and WtW enrollment data, 2001-2002; Base Wage/ES-202, EDD, 1999-2000.

**Figure 1-D. Quarterly Employment Status for CTI Participants and Dropouts based on Exit Date**



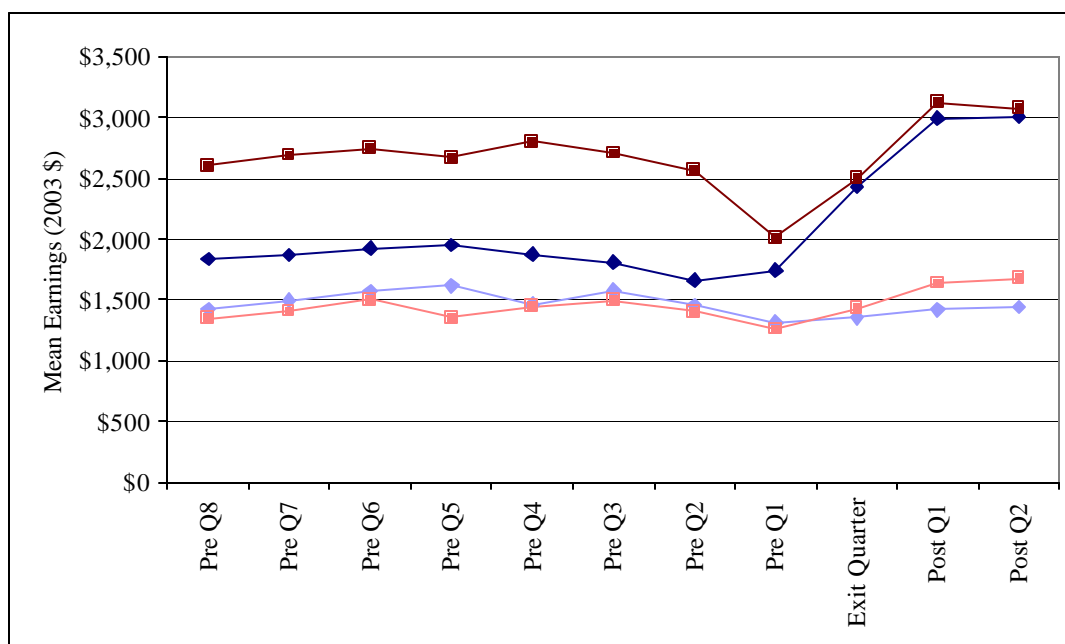
Source: WIA and WtW enrollment data, 2001-2002; Base Wage/ES-202, EDD, 1999-2000.

**Figure 2-D. Quarterly Healthcare Employment Status for CTI Participants and Dropouts based on Exit Date**



Source: WIA and WtW enrollment data, 2001-2002; Base Wage/ES-202, EDD, 1999-2000.

**Figure 3-D. Quarterly Earnings for CTI Participants and Dropouts based on Exit Date**



Source: WIA and WtW enrollment data, 2001-2002; Base Wage/ES-202, EDD, 1999-2000.

NOTE: Earnings calculations include individuals with zero earnings.

**Table 41-D. Logistic Regression Model Predicting CTI Dropout**

Independent Variable	Coefficient Estimate	Standard Error	Percent Change	p-value
Intercept	-0.7538	(0.6769)		
CNA Training Group	-1.1367	(0.1486)	-11.35%	***
IHSS Training Group	-1.9713	(0.5063)	-19.68%	***
Heard about CTI from Established Channels	-0.7187	(0.2262)	-7.18%	**
Heard about CTI from "Someone Else"	0.5028	(0.1409)	5.02%	***
Age of Participant (as of Jan. 1, 2001)	-0.0077	(0.0357)	-0.08%	
Age of Participant, Squared	0.0001	(0.0005)	0.00%	
Male	-0.0612	(0.2094)	-0.61%	
Asian/Pacific Islander	0.1408	(0.2471)	1.41%	
African American	0.3894	(0.1948)	3.89%	*
Hispanic	0.0753	(0.1842)	0.75%	
Other Race/Ethnicity (excluding NH Whites)	0.3786	(0.2837)	3.78%	
High School Graduate	-0.2169	(0.1585)	-2.17%	
Never Married	-0.0059	(0.1507)	-0.06%	
Regularly Care for Someone Else	-0.3816	(0.1612)	-3.81%	**
Non-Citizen	-0.3634	(0.2261)	-3.63%	
Limited English Proficiency	0.0953	(0.2574)	0.95%	
Own a Car	-0.4565	(0.1429)	-4.56%	**
Number of Months on Welfare, 1998-2001	0.0091	(0.0048)	0.09%	
# of Qtrs. Employed in Health Services, 1999-2000	0.0043	(0.0318)	0.04%	

# of Qtrs. Emp. outside Health Services, 1999-2000	-0.0209	(0.0239)	-0.21%
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Regional Unemployment Rate	1.1049	(1.7911)	11.03%
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N=2,158

Source: WIA and WtW enrollment data, 2001-2002; CTI Baseline Information Form, 2001-2002; Base Wage/ES-202, EDD, 1999-2000; MEDS, DHS, 1987-2001.

**APPENDIX E. DEMOGRAPHIC INFORMATION--  
PARTICIPANTS AND COMPARISON GROUPS**



**Table 42-E. Demographic Profile of CTI Participants by Training Site, from Baseline Information Forms**

	Kern County	Long Beach	NOR- TEC	North Bay	River- side	SELA - CO	SETA	San Diego	San Fran	San Jose	Ventura	West Hills
Number with Baseline Forms	503	219	243	208	370	265	387	269	299	320	77	973
<u>Marital Status (%):</u>												
Married	28.2%	30.1%	30.5%	29.8%	25.1%	7.9%	29.5%	28.3%	44.5%	27.8%	32.5%	34.0%
Separated	7.8%	7.8%	9.5%	4.8%	18.1%	8.7%	9.0%	11.9%	9.0%	9.4%	11.7%	8.4%
Divorced	15.7%	18.7%	22.6%	21.6%	11.6%	2.6%	9.6%	11.9%	9.0%	13.1%	14.3%	9.2%
Widowed	0.8%	6.4%	3.3%	1.4%	1.6%	0.0%	0.8%	1.1%	4.7%	1.9%	0.0%	1.2%
Never Married	44.5%	35.2%	29.6%	38.9%	38.1%	60.8%	41.1%	43.5%	29.4%	46.3%	39.0%	44.4%
Ref/Unknown	3.0%	1.8%	4.5%	3.4%	5.4%	20.0%	10.1%	3.4%	3.3%	1.6%	2.6%	2.8%
<u>Children Living w/ You (% Yes)</u>												
(if yes) Mean number under 5	0.9	0.5	0.7	0.5	0.7	0.9	0.7	0.8	0.6	0.7	0.8	0.8
(if yes) Mean number 5-17	1.2	1.3	1.3	1.2	1.6	1.3	1.3	1.1	1.1	1.1	1.1	1.2
<u>Care for Someone (% Yes)</u>												
(if yes) Are you paid (% Yes)	25.1%	62.1%	35.4%	34.6%	38.7%	10.6%	20.2%	34.2%	48.8%	40.6%	27.3%	23.5%
(if yes) Is it a relative (% Yes)	42.1%	77.9%	72.1%	68.1%	61.5%	50.0%	43.6%	34.8%	49.3%	42.3%	52.4%	42.8%
	49.2%	44.1%	17.4%	22.2%	15.4%	17.9%	32.1%	48.9%	31.5%	46.2%	57.1%	42.4%
<u>Worked Last Week (% Yes)</u>												
(if yes) Mean number of hours	38.8%	58.0%	46.5%	58.2%	57.6%	12.1%	36.7%	28.8%	43.8%	34.8%	39.0%	46.5%
	29	29.4	29.3	33.3	36.1	27.7	31.8	28.2	29.5	31.1	22.7	31.4
<u>Worked in Past Year (% Yes)</u>												
(if yes) Mean number of weeks	64.4%	65.8%	66.7%	75.5%	74.6%	30.6%	54.5%	47.2%	67.2%	52.0%	74.0%	54.5%
	31.4	39.6	34	36.8	38.2	28.5	32.7	28.5	31.9	31.5	32.2	36.6
<u>HC Job in Past Year (% Yes)</u>												
(if no) HC job ever (% Yes)	25.5%	59.8%	34.6%	44.7%	44.1%	10.9%	23.5%	23.4%	39.8%	30.4%	33.8%	30.9%
	19.6%	28.0%	20.4%	25.2%	17.9%	7.5%	17.8%	17.8%	18.6%	23.1%	27.1%	16.2%
Previous Training in HC (% Yes)	32.8%	41.1%	36.6%	51.4%	36.8%	13.2%	24.0%	35.3%	39.5%	35.1%	42.9%	44.8%
<u>Other Adults Work FT (% Yes)</u>												
(if yes) Mean # who work FT	46.3%	32.9%	25.1%	43.3%	28.3%	7.2%	32.0%	50.6%	37.8%	33.2%	59.7%	46.2%
	1.3	1.5	1.4	1.3	1.2	1.1	1.3	1.2	1.2	1.4	1.4	1.4

<u>Other Adults Work PT (% Yes)</u>	14.3%	14.6%	6.6%	10.6%	5.5%	2.7%	12.1%	7.9%	9.4%	10.0%	11.7%	11.6%
(if yes) Mean # who work PT	1.2	1.2	2.1	1	1.2	1.6	1.1	1.2	1.2	1.1	1.1	1.3
Own a Car (% Yes)	67.4%	68.0%	76.5%	76.0%	64.6%	35.9%	67.7%	52.8%	49.2%	62.1%	79.2%	63.2%

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**Table 43-E. Demographic Profile of CTI Participants by Training Site, from WIA Database**

	Kern County	Long Beach	NOR- TEC	North Bay	Riverside	SELACO	SETA	San Diego	San Francisco	San Jose	Ventura County	West Hills
<u>Number</u>	<u>579</u>	<u>524</u>	<u>875</u>	<u>279</u>	<u>376</u>	<u>337</u>	<u>530</u>	<u>403</u>	<u>349</u>	<u>435</u>	<u>88</u>	<u>1,041</u>
Female (%)	88.4%	88.7%	84.8%	84.6%	91.2%	93.8%	88.1%	88.3%	90.3%	85.3%	96.6%	88.6%
<u>Ethnicity</u>												
African American	9.3%	35.9%	2.9%	19.0%	11.4%	19.3%	35.9%	25.1%	17.2%	36.8%	3.4%	12.4%
Asian/Pacific Islander	9.3%	20.6%	5.0%	14.0%	4.3%	5.6%	16.4%	16.6%	47.6%	26.2%	3.4%	13.2%
Hispanic	37.5%	28.1%	7.2%	19.7%	61.2%	68.8%	15.9%	33.0%	22.9%	21.4%	42.1%	40.0%
Non-Hispanic White	39.0%	10.3%	73.6%	41.9%	21.0%	4.2%	27.4%	23.6%	10.9%	12.9%	42.1%	25.7%
Other	4.8%	5.2%	11.3%	5.4%	2.1%	2.1%	4.5%	1.7%	1.4%	2.8%	9.1%	8.8%
<u>Age</u>												
Under 21	27.1%	4.6%	20.0%	11.1%	16.2%	15.4%	16.0%	24.6%	8.6%	13.3%	21.6%	27.8%
21 to 30	38.9%	14.9%	28.3%	34.4%	34.3%	49.3%	35.1%	35.5%	24.1%	32.9%	40.9%	36.8%
31 to 40	19.3%	21.4%	24.3%	26.2%	27.7%	24.9%	25.3%	21.6%	27.5%	26.4%	18.2%	20.3%
41 to 50	11.6%	28.1%	16.8%	21.5%	17.0%	8.9%	17.6%	15.1%	21.8%	18.6%	14.8%	11.9%
Over 50	3.1%	31.1%	10.5%	6.8%	4.8%	1.5%	6.0%	3.2%	18.1%	8.7%	4.6%	3.3%
Mean/Median	28.1/25.0	42.9/44.0	32.8/31.0	33.4/32.0	31.7/30.0	28.9/28.0	32.0/30.0	29.2/27.0	37.6/37.0	33.3/32.0	29.8/26.5	28.6/26.0
<u>Educational Attainment</u>												
Less Than High School	16.1%	25.0%	19.5%	14.3%	40.2%	54.9%	16.6%	32.0%	20.9%	24.8%	18.2%	19.9%
High School Grade / GED	68.2%	36.8%	47.4%	43.4%	48.1%	40.1%	66.6%	53.6%	44.7%	57.7%	62.5%	48.8%
Post High School Education	13.5%	24.1%	28.6%	31.5%	9.3%	3.3%	12.5%	11.7%	20.6%	11.7%	19.3%	25.8%
College Graduate	2.3%	14.1%	4.5%	10.8%	2.4%	1.8%	4.3%	2.7%	13.8%	5.8%	0.0%	5.5%
<u>Number of Dependents</u>												
Zero	43.4%	57.8%	47.9%	39.1%	25.8%	11.6%	39.3%	37.2%	46.1%	31.5%	64.8%	34.3%
One	18.5%	18.1%	20.5%	28.7%	21.5%	33.2%	20.6%	24.3%	24.6%	31.3%	13.6%	25.4%
Two	22.5%	14.9%	18.1%	20.1%	23.4%	29.1%	22.3%	22.6%	18.3%	23.7%	11.4%	22.2%
Three or more	15.7%	9.2%	13.6%	12.2%	29.3%	26.1%	17.9%	15.9%	10.9%	13.6%	10.2%	18.2%
Mean/Median	1.2/1.0	0.8/0.0	1.1/1.0	1.1/1.0	1.7/2.0	1.9/2.0	1.3/1.0	1.3/1.0	1.0/1.0	1.2/1.0	0.7/0.0	1.4/1.0
% Non-Citizen	11.1%	19.9%	3.0%	14.3%	21.5%	12.5%	16.8%	24.6%	41.3%	20.7%	4.6%	8.9%
% Limited English Speaker	0.5%	29.2%	2.9%	8.6%	18.6%	15.4%	1.9%	7.4%	28.7%	16.6%	8.0%	9.1%

Welfare History of All CTI Participants by Training Site												
	Kern County	Long Beach	NOR- TEC	North Bay	Riverside	SELACO	SETA	San Diego	San Francisco	San Jose	Ventura County	West Hills
Ever Received Welfare (87-01)	53.5%	33.0%	53.8%	48.0%	60.1%	85.8%	56.6%	54.6%	22.4%	49.2%	51.1%	52.8%
Ever Received Welfare (00-01)	27.3%	15.7%	27.7%	27.2%	42.0%	78.0%	35.3%	31.0%	14.3%	29.9%	33.0%	25.8%
Received Welfare at Intake	18.7%	9.4%	17.6%	20.4%	35.6%	74.8%	24.3%	24.1%	10.0%	23.0%	19.3%	21.8%
<u>Months on Welfare (98-01)</u>												
None	63.6%	80.3%	65.1%	65.6%	51.1%	19.3%	58.9%	61.8%	83.4%	64.6%	65.9%	67.4%
1 to 12	14.9%	5.2%	10.5%	14.7%	13.8%	16.9%	11.9%	15.9%	6.3%	10.8%	15.9%	9.0%
13 to 24	7.4%	3.1%	9.9%	7.9%	12.2%	15.4%	8.3%	9.4%	3.2%	8.1%	4.6%	8.8%
25 to 36	8.5%	4.0%	7.1%	6.8%	12.0%	17.5%	9.3%	6.5%	2.0%	7.1%	8.0%	7.0%
37 to 48	5.7%	7.4%	7.3%	5.0%	10.9%	30.9%	11.7%	6.5%	5.2%	9.4%	5.7%	7.7%
Mean/Median	7.5/0.0	5.5/0.0	7.8/0.0	6.8/0.0	11.7/0.0	22.8/24.0	10.6/0.0	7.8/0.0	3.9/0.0	8.8/0.0	7.0/0.0	7.8/0.0
Training Type of CTI Participants by Training Site												
<u>Type of Training</u>												
CNA/HHA	73.6%	15.3%	4.1%	17.9%	66.8%	60.8%	46.4%	46.7%	24.9%	29.2%	15.9%	11.0%
IHSS	0.0%	20.4%	0.3%	0.0%	1.3%	0.0%	0.0%	2.0%	16.3%	0.0%	0.0%	0.0%
LVN/RN	13.3%	6.1%	2.4%	11.8%	27.7%	11.9%	8.5%	2.0%	5.7%	0.9%	5.7%	2.2%
Other	0.0%	0.0%	0.2%	28.0%	2.4%	0.0%	2.1%	6.7%	5.7%	13.3%	9.1%	33.3%
Unknown	13.1%	58.2%	92.9%	42.3%	1.9%	27.3%	43.0%	42.7%	47.3%	56.6%	69.3%	53.5%
<u>Training Exit Status</u>												
Still Enrolled	26.4%	65.3%	18.4%	55.9%	44.2%	26.1%	29.3%	1.2%	37.3%	33.6%	40.9%	12.8%
Entered Employment	47.2%	24.4%	40.8%	34.1%	39.9%	70.6%	35.3%	69.7%	44.4%	33.6%	37.5%	15.3%
In Add. Ed/Service	0.2%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	2.7%	0.0%	1.2%	0.0%	0.0%
Completed Ed/Services	17.3%	9.0%	19.4%	3.9%	8.0%	3.0%	12.8%	11.7%	12.9%	13.1%	8.0%	51.1%
Soft Exit	0.4%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dropout	6.7%	1.2%	12.5%	3.9%	6.9%	0.0%	22.5%	11.9%	4.0%	15.6%	11.4%	20.7%
Other	1.9%	0.2%	8.6%	2.2%	0.8%	0.0%	0.2%	2.7%	1.4%	3.0%	2.3%	0.2%

**Table 44-E. Demographic Profile of CTI-WIA Participants by Training Site**

	Kern County	Long Beach	NORTEC	North Bay	Riverside	SELACO	SETA	San Diego	San Francisco	San Jose	Ventura County	West Hills
<u>Number</u>	<u>469</u>	<u>453</u>	<u>665</u>	<u>175</u>	<u>198</u>	<u>197</u>	<u>390</u>	<u>244</u>	<u>296</u>	<u>219</u>	<u>68</u>	<u>748</u>
Female (%)	87.0%	88.3%	83.3%	78.3%	85.9%	92.4%	84.6%	85.3%	89.2%	80.8%	95.6%	88.6%
<u>Ethnicity</u>												
African American	6.0%	31.6%	3.0%	18.3%	11.1%	17.3%	30.0%	19.3%	13.9%	33.8%	4.4%	13.2%
Asian/Pacific Islander	10.2%	23.0%	3.2%	18.9%	7.6%	8.6%	18.7%	19.7%	53.4%	28.8%	4.4%	12.7%
Hispanic	37.3%	28.3%	7.1%	15.4%	52.0%	68.0%	16.9%	29.5%	21.3%	22.4%	42.7%	38.0%
Non-Hispanic White	40.9%	11.3%	75.5%	42.3%	26.3%	4.1%	30.3%	29.9%	9.8%	12.8%	39.7%	27.4%
Other	5.6%	6.0%	11.3%	5.1%	3.0%	2.0%	4.1%	1.6%	1.7%	2.3%	8.8%	8.7%
<u>Age</u>												
Under 21	28.1%	4.9%	22.0%	12.6%	15.7%	16.2%	16.4%	25.4%	8.8%	14.2%	22.1%	29.1%
21 to 30	36.9%	11.5%	25.4%	28.6%	30.8%	50.8%	30.5%	30.3%	22.6%	27.9%	35.3%	35.3%
31 to 40	18.8%	18.3%	21.4%	22.9%	23.7%	24.4%	23.1%	22.5%	27.0%	29.7%	20.6%	21.0%
41 to 50	12.6%	29.8%	18.2%	25.7%	22.2%	6.6%	21.8%	17.6%	21.6%	19.2%	16.2%	11.1%
Over 50	3.6%	35.5%	13.1%	10.3%	7.6%	2.0%	8.2%	4.1%	19.9%	9.1%	5.9%	3.5%
Mean/Median	28.4/25.0	44.4/46.0	33.4/31.0	35.1/33.0	33.2/32.0	28.5/27.0	33.2/31.5	29.9/28.0	38.1/37.0	33.8/34.0	30.6/27.0	28.5/26.0
<u>Educational Attainment</u>												
Less Than High School	13.7%	24.5%	15.5%	6.3%	28.8%	44.7%	11.5%	25.4%	19.3%	19.6%	17.7%	18.3%
High School Grade / GED	68.7%	36.4%	48.7%	40.6%	52.5%	48.2%	69.5%	56.2%	42.6%	54.8%	61.8%	48.5%
Post High School Education	15.4%	24.9%	30.2%	37.7%	14.7%	4.1%	13.6%	15.2%	23.3%	15.5%	20.6%	28.2%
College Graduate	2.4%	14.1%	5.6%	15.4%	4.0%	3.1%	5.4%	3.3%	14.9%	10.1%	0.0%	5.0%
<u>Number of Dependents</u>												
Zero	49.9%	66.5%	61.2%	58.3%	45.5%	17.8%	49.5%	54.9%	48.7%	46.6%	79.4%	36.0%
One	17.1%	15.5%	16.4%	17.7%	21.7%	34.0%	18.5%	19.7%	23.3%	25.6%	7.4%	25.3%
Two	20.9%	10.8%	14.7%	15.4%	16.2%	26.4%	19.0%	16.8%	17.9%	19.2%	7.4%	20.9%
Three or more	12.2%	7.3%	7.7%	8.6%	16.7%	21.8%	13.1%	8.6%	10.1%	8.7%	5.9%	17.9%
Mean/Median	1.0/1.0	0.6/0.0	0.7/0.0	0.8/0.0	1.1/1.0	1.7/1.0	1.0/1.0	0.9/0.0	0.9/1.0	0.9/1.0	0.4/0.0	1.3/1.0
Pct. Non-Citizen	12.6%	20.5%	2.1%	16.0%	24.8%	13.7%	17.4%	25.4%	42.9%	20.1%	5.9%	9.0%
Pct. Limited English Speaker	0.6%	30.5%	0.6%	5.1%	19.2%	15.2%	2.3%	6.2%	28.4%	12.8%	8.8%	8.0%

Welfare history of CTI-WIA participants by training site												
	Kern County	Long Beach	NORTEC	North Bay	Riverside	SELACO	SETA	San Diego	San Francisco	San Jose	Ventura County	West Hills
Ever Received Welfare (87-01)	47.1%	26.1%	45.3%	30.3%	35.9%	78.2%	45.4%	36.9%	15.5%	32.0%	36.8%	52.4%
Ever Received Welfare (00-01)	17.3%	8.8%	16.4%	8.6%	8.1%	69.0%	19.0%	7.8%	9.8%	9.1%	16.2%	25.7%
Received Welfare at Intake	8.1%	3.8%	5.0%	2.9%	4.0%	61.4%	7.7%	1.2%	6.4%	2.3%	8.8%	21.0%
<u>Months on Welfare (98-01)</u>												
None	72.5%	87.6%	77.0%	85.7%	81.8%	28.4%	74.1%	84.0%	89.5%	84.0%	82.4%	67.4%
1 to 12	14.1%	4.0%	7.8%	8.0%	7.6%	19.8%	8.2%	6.6%	5.1%	6.9%	7.4%	9.2%
13 to 24	5.5%	2.4%	6.6%	2.3%	6.6%	14.7%	6.7%	5.7%	1.7%	5.0%	2.9%	9.2%
25 to 36	6.2%	3.3%	5.4%	1.7%	3.0%	14.2%	5.9%	3.3%	1.0%	2.3%	5.9%	6.6%
37 to 48	1.7%	2.7%	3.2%	2.3%	1.0%	22.8%	5.1%	0.4%	2.7%	1.8%	1.5%	7.6%
Mean/Median	4.6/0.0	2.9/0.0	4.5/0.0	2.6/0.0	3.0/0.0	18.3/14.0	6.0/0.0	2.9/0.0	2.1/0.0	3.0/0.0	3.4/0.0	7.7/0.0
Training type of CTI-WIA participants by training site												
<u>Type of Training</u>												
CNA/HHA	70.2%	13.0%	3.6%	18.9%	45.0%	41.1%	40.8%	59.4%	19.6%	18.7%	17.7%	8.4%
IHSS	0.0%	18.8%	0.5%	0.0%	2.5%	0.0%	0.0%	1.2%	18.2%	0.0%	0.0%	0.0%
LVN/RN	15.6%	6.0%	2.9%	16.6%	47.0%	18.8%	9.0%	2.9%	6.8%	1.8%	7.4%	2.7%
Other	0.0%	0.0%	0.3%	29.7%	3.0%	0.0%	2.1%	7.8%	6.8%	16.4%	8.8%	33.0%
Unk	14.3%	62.3%	92.8%	34.9%	2.5%	40.1%	48.2%	28.7%	48.7%	63.0%	66.2%	55.9%
<u>Training Exit Status</u>												
Still Enrolled	30.3%	66.7%	18.2%	47.4%	63.6%	28.9%	32.8%	0.8%	38.5%	26.0%	41.2%	13.1%
Entered Employment	42.2%	23.8%	43.5%	44.0%	28.8%	67.5%	35.1%	68.4%	44.3%	37.9%	33.8%	14.8%
In Add. Ed/Service	0.2%	0.0%	0.5%	0.0%	0.0%	0.5%	0.0%	2.5%	0.0%	1.8%	0.0%	0.0%
Completed Ed/Services	19.0%	8.6%	17.9%	4.0%	3.5%	3.1%	12.1%	15.2%	12.2%	13.7%	8.8%	53.1%
Soft Exit	0.4%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dropout	6.0%	0.9%	11.7%	2.9%	2.5%	0.0%	19.7%	11.5%	4.1%	16.9%	13.2%	18.7%
Other	1.9%	0.0%	8.3%	1.7%	1.0%	0.0%	0.3%	1.6%	1.0%	3.7%	2.9%	0.3%

For the WIA participants:

- Long Beach and San Jose had the highest proportion of African American participants, just under one-third.
- Riverside had the largest proportion of Hispanic participants, over two-thirds (68%).
- NoRTEC had the largest proportion of non-Hispanic white participants (75.5%).

- Ages were somewhat similar across sites, but Long Beach had the oldest group (mean=44.4 years).
- SELACO participants had the least education, with 45% lacking high school degrees, compared with North Bay, where more than half had post-high school education.
- SELACO had the largest group of former welfare recipients, by far, with over three-fourths receiving welfare at some time, and an average of over 18 months on welfare.

**Table 45-E. Demographic Profile of CTI-WTW Participants by Training Site**

	Kern County	Long Beach	NORTEC	North Bay	Riverside	SELACO	SETA	San Diego	San Francisco	San Jose	Ventura County	West Hills
<u>Number</u>	<u>110</u>	<u>71</u>	<u>210</u>	<u>104</u>	<u>178</u>	<u>140</u>	<u>140</u>	<u>159</u>	<u>53</u>	<u>216</u>	<u>20</u>	<u>293</u>
% of total who are WtW	19.0%	13.5%	31.7%	37.3%	47.3%	41.5%	26.4%	39.5%	15.2%	49.7%	22.7%	28.1%
% Female	94.6%	91.6%	89.5%	95.2%	97.2%	95.7%	97.9%	93.1%	96.2%	89.8%	100.0%	88.4%
<u>Ethnicity</u>												
African American	23.6%	63.4%	2.4%	20.2%	11.8%	22.1%	52.1%	34.0%	35.9%	39.8%	0.0%	10.2%
Asian/Pacific Islander	5.5%	5.6%	11.0%	5.8%	0.6%	1.4%	10.0%	12.0%	15.1%	23.6%	0.0%	14.3%
Hispanic	38.2%	26.8%	7.6%	26.9%	71.4%	70.0%	12.9%	38.4%	32.1%	20.4%	40.0%	45.1%
Non-Hispanic White	30.9%	4.2%	67.6%	41.4%	15.2%	4.3%	19.3%	13.8%	17.0%	13.0%	50.0%	21.2%
Other	1.8%	0.0%	11.4%	5.8%	1.1%	2.1%	5.7%	1.9%	0.0%	3.2%	10.0%	9.2%
<u>Age</u>												
Under 21	22.7%	2.8%	13.8%	8.7%	16.9%	14.3%	15.0%	23.3%	7.6%	12.5%	20.0%	24.2%
21 to 30	47.3%	36.6%	37.6%	44.2%	38.2%	47.1%	47.9%	43.4%	32.1%	38.0%	60.0%	40.6%
31 to 40	21.8%	40.9%	33.8%	31.7%	32.0%	25.7%	31.4%	20.1%	30.2%	23.2%	10.0%	18.4%
41 to 50	7.3%	16.9%	12.4%	14.4%	11.2%	12.1%	5.7%	11.3%	22.6%	18.1%	10.0%	14.0%
Over 50	0.9%	2.8%	2.4%	1.0%	1.7%	0.7%	0.0%	1.9%	7.6%	8.3%	0.0%	2.7%
Mean/Median	27.1/24.5	33.8/35.0	30.9/30.0	30.5/30.0	30.1/29.0	29.5/28.0	28.7/28.0	28.1/25.0	34.9/35.0	32.8/30.0	26.9/26.0	28.8/26.0
<u>Educational Attainment</u>												
Less Than High School	26.4%	28.2%	32.4%	27.9%	52.8%	69.3%	30.7%	42.1%	30.2%	30.1%	20.0%	23.9%
High School Grade / GED	66.4%	39.4%	43.3%	48.1%	43.3%	28.6%	58.6%	49.7%	56.6%	60.7%	65.0%	49.5%
Post High School Education	5.5%	18.3%	23.3%	21.2%	3.4%	2.1%	9.3%	6.3%	5.7%	7.9%	15.0%	19.8%
College Graduate	1.8%	14.1%	1.0%	2.9%	0.6%	0.0%	1.4%	1.9%	7.6%	1.4%	0.0%	6.8%
<u>Number of Dependents</u>												
Zero	15.5%	2.8%	5.7%	6.7%	3.9%	2.9%	10.7%	10.1%	32.1%	16.2%	15.0%	30.0%
One	24.6%	35.2%	33.3%	47.1%	21.4%	32.1%	26.4%	31.5%	32.1%	37.0%	35.0%	25.6%
Two	29.1%	40.9%	28.6%	27.9%	31.5%	32.9%	31.4%	31.5%	20.8%	28.2%	25.0%	25.6%
Three or more	30.9%	21.1%	32.4%	18.3%	43.3%	32.1%	31.4%	27.0%	15.1%	18.5%	25.0%	18.8%
Mean/Median	1.9/2.0	2.0/2.0	2.2/2.0	1.6/1.0	2.4/2.0	2.2/2.0	2.1/2.0	1.9/2.0	1.2/1.0	1.5/1.0	1.8/1.5	1.4/1.0



Pct. Non-Citizen	4.6%	15.5%	5.7%	11.5%	18.0%	10.7%	15.0%	23.3%	32.1%	21.3%	0.0%	8.9%
Pct. Limited English Speaker	0.0%	21.1%	10.0%	14.4%	18.0%	15.7%	0.7%	9.4%	30.2%	20.4%	5.0%	12.0%
<b>Welfare history of CTI-WTW participants by training site</b>												
Ever Received Welfare (87-01)	80.9%	77.5%	81.0%	77.9%	87.1%	96.4%	87.9%	81.8%	60.4%	66.7%	100.0%	53.9%
Ever Received Welfare (00-01)	70.0%	59.2%	63.3%	58.7%	79.8%	90.7%	80.7%	66.7%	39.6%	50.9%	90.0%	26.3%
Received Welfare at Intake	63.6%	45.1%	57.6%	50.0%	70.8%	93.6%	70.7%	59.1%	30.2%	44.0%	55.0%	23.9%
<b>Months on Welfare (98-01)</b>												
None	25.5%	33.8%	27.6%	31.7%	16.9%	6.4%	16.4%	27.7%	49.1%	44.9%	10.0%	67.6%
1 to 12	18.2%	12.7%	19.1%	26.0%	20.8%	12.9%	22.1%	30.2%	13.2%	14.8%	45.0%	8.5%
13 to 24	15.5%	7.0%	20.5%	17.3%	18.5%	16.4%	12.9%	15.1%	11.3%	11.1%	10.0%	7.9%
25 to 36	18.2%	8.5%	12.4%	15.4%	21.9%	22.1%	18.6%	11.3%	7.6%	12.0%	15.0%	8.2%
37 to 48	22.7%	38.0%	20.5%	9.6%	21.9%	42.1%	30.0%	15.7%	18.9%	17.1%	20.0%	7.9%
Mean/Median	19.8/19.0	21.9/20.0	18.0/16.7	14.0/10.5	21.3/20.0	29.3/34.0	23.4/22.5	15.2/12.0	13.8/1.0	14.6/5.0	19.0/12.0	7.8/0.0
<b>Training type of CTI-WTW participants by training site</b>												
	Kern County	Long Beach	NORTEC	North Bay	Riverside	SELACO	SETA	San Diego	San Francisco	San Jose	Ventura County	West Hills
<b>Type of Training</b>												
CNA/HHA	88.2%	29.6%	5.7%	16.4%	91.0%	88.6%	62.1%	27.0%	54.7%	39.8%	10.0%	17.4%
IHSS	0.0%	31.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%	5.7%	0.0%	0.0%	0.0%
LVN/RN	3.6%	7.0%	1.0%	3.9%	6.2%	2.1%	7.1%	0.6%	0.0%	0.0%	0.0%	1.0%
Other	0.0%	0.0%	0.0%	25.0%	1.7%	0.0%	2.1%	5.0%	0.0%	10.2%	10.0%	34.1%
Unk	8.2%	32.4%	93.3%	54.8%	1.1%	9.3%	28.6%	64.2%	39.6%	50.0%	80.0%	47.4%
<b>Training Exit Status</b>												
Still Enrolled	10.0%	56.3%	19.1%	70.2%	22.5%	22.1%	19.3%	1.9%	30.2%	41.2%	40.0%	12.0%
Entered Employment	68.2%	28.2%	32.4%	17.3%	52.3%	75.0%	35.7%	71.7%	45.3%	29.2%	50.0%	16.4%
In Add. Ed/Service	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%	0.0%	0.5%	0.0%	0.0%
Completed Ed/Services	10.0%	11.3%	24.3%	3.9%	12.9%	2.9%	15.0%	6.3%	17.0%	12.5%	5.0%	46.1%
Soft Exit	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dropout	10.0%	2.8%	14.8%	5.8%	11.8%	0.0%	30.0%	12.6%	3.8%	14.4%	5.0%	25.6%
Other	1.8%	1.4%	9.5%	2.9%	0.6%	0.0%	0.0%	4.4%	3.8%	2.3%	0.0%	0.0%

For the Welfare-to-Work participants:

- Long Beach had the highest proportion of African Americans (63.4%), San Jose, the most Asian/Pacific Islanders (almost one-fourth) and Riverside and SELACO the most Hispanic participants, both 70% or more.
- Mean ages varied little, with San Francisco's the highest at 34.9 years.
- As for the WIA group, SELACO's WtW group had the lowest educational attainment, with almost 70% lacking high school degrees. Only 2% at SELACO had some post high school training, compared with the other extreme, Long Beach, where almost a third did.
- Those with the fewest children were in San Francisco, and the most, in Riverside (mean numbers of children were 1.2 versus 2.4).
- While the welfare histories were understandably not as diverse among the sites as for the WIA group, SELACO again had the highest concentration of welfare use, with mean months on welfare (from 1998 to 2001) averaging 29.3 compared with the low of 7.8 months at West Hills.

**Table 46-E. Demographic Profile of CTI Participants, by Training Type**

	CNA/HHA Training	IHSS Training	LVN/RN Training	Other Training	Unknown Training
<u>Number</u>	<u>1,824</u>	<u>180</u>	<u>412</u>	<u>560</u>	<u>2,840</u>
% Female	90.3%	85.6%	86.9%	84.6%	87.9%
<u>Ethnicity</u>					
African American	21.0%	27.8%	20.4%	16.6%	16.2%
Asian/Pacific Islander	12.3%	36.7%	17.5%	12.7%	14.8%
Hispanic	39.3%	25.6%	22.1%	39.5%	25.1%
Non-Hispanic White	23.2%	6.7%	34.2%	24.5%	37.3%
Other	4.2%	3.3%	5.8%	6.8%	6.6%
<u>Age</u>					
Under 21	20.3%	2.2%	14.8%	22.3%	18.3%
21 to 30	37.1%	8.3%	39.1%	32.0%	31.2%
31 to 40	22.9%	17.2%	23.3%	24.5%	23.8%
41 to 50	13.5%	35.6%	18.5%	15.9%	17.2%
Over 50	6.1%	36.7%	4.4%	5.4%	9.6%
Mean/Median	30.6/28.0	46.4/46.0	31.4/29.5	30.8/28.0	32.7/31.0
<u>Educational Attainment</u>					
Less Than High School	31.5%	36.7%	3.6%	18.4%	22.3%
High School Grade / GED	55.1%	39.4%	55.6%	53.4%	48.4%
Post High School Education	10.1%	10.6%	31.3%	23.2%	22.8%
College Graduate	3.3%	13.3%	9.5%	5.0%	6.5%
<u>Number of Dependents</u>					
Zero	33.1%	56.1%	43.9%	34.5%	42.6%
One	22.7%	18.3%	24.0%	25.9%	23.5%
Two	23.9%	15.6%	17.2%	23.9%	19.6%
Three or more	20.3%	10.0%	14.8%	15.7%	14.3%
Mean/Median	1.4/1.0	0.8/0.0	1.1/1.0	1.3/1.0	1.1/1.0
Pct. Non-Citizen	17.7%	33.9%	16.3%	10.4%	13.0%
Pct. Limited English Speaker	9.4%	43.3%	2.2%	9.3%	11.7%

**Welfare History of CTI Participants by Training Type**

	CNA/HHA Training	IHSS Training	LVN/RN Training	Other Training	Unknown Training
Ever Received Welfare (1987-2001)	61.2%	27.2%	37.4%	52.0%	49.3%
Ever Received Welfare (2000-2001)	41.3%	16.7%	13.6%	27.0%	27.4%
Received Welfare at Intake	33.0%	8.9%	7.8%	19.5%	21.2%
<u>Months on Welfare (1998-2001)</u>					
None	52.7%	82.2%	79.9%	66.3%	66.3%
1 to 12	13.1%	5.6%	8.3%	11.4%	11.0%
13 to 24	9.5%	3.3%	6.3%	9.6%	8.1%
25 to 36	11.1%	2.2%	2.9%	7.9%	6.5%

37 to 48	13.7%	6.7%	2.7%	4.8%	8.0%
Mean/Median	12.1/0.0	4.8/0.0	3.8/0.0	7.0/0.0	7.8/0.0

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**Profile of CTI Participants, by Training Type, from WIA Database**

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	CNA/HHA Training	IHSS Training	LVN/RN Training	Other Training	Unknown Training
<u>Training Site</u>					
Kern	23.4%	0.0%	18.7%	0.0%	2.7%
Long Beach	4.4%	59.4%	7.8%	0.0%	10.7%
NORTEC	2.0%	1.7%	5.1%	0.4%	28.6%
North Bay	2.7%	0.0%	8.0%	13.9%	4.2%
Riverside	13.8%	2.8%	25.2%	1.6%	0.3%
SELACO	11.2%	0.0%	9.7%	0.0%	3.2%
SETA	13.5%	0.0%	10.9%	2.0%	8.0%
San Diego	10.3%	4.4%	1.9%	4.8%	6.1%
San Francisco	4.8%	31.7%	4.9%	3.6%	5.8%
San Jose	7.0%	0.0%	1.0%	10.4%	8.7%
Ventura	0.8%	0.0%	1.2%	1.4%	2.2%
West Hills	6.3%	0.0%	5.6%	62.0%	19.6%
<u>Training Exit Status</u>					
Still Enrolled	15.6%	29.4%	68.9%	16.1%	33.8%
Entered Employment	58.5%	39.4%	10.2%	19.5%	32.2%
In Add. Ed/Service	0.3%	0.0%	0.2%	0.7%	0.4%
Completed Ed/Services	14.2%	26.1%	7.8%	40.2%	19.8%
Soft Exit	0.1%	0.0%	0.2%	0.0%	0.0%
Dropout	9.9%	2.8%	10.7%	22.7%	10.9%
Other	1.4%	2.2%	1.9%	0.9%	3.1%

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**Profile of CTI Participants, by Training Type, from Baseline Data**

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	CNA/HHA Training	IHSS Training	LVN/RN Training	Other Training	Unknown Training
<u>Number with Baseline Data</u>					
	<u>1,824</u>	<u>179</u>	<u>412</u>	<u>560</u>	<u>1,158</u>
<u>Marital Status (%):</u>					
Married	24.3%	47.5%	32.5%	32.5%	33.0%
Separated	10.9%	7.8%	8.3%	9.1%	8.3%
Divorced	11.1%	17.3%	15.1%	11.6%	12.7%
Widowed	1.5%	9.5%	0.7%	1.3%	1.6%
Never Married	46.1%	15.1%	37.6%	41.6%	40.9%
Ref/Unknown	6.1%	2.8%	5.8%	3.9%	3.5%
<u>Children Living with You (% Yes)</u>					
(if yes) Mean number under 5	0.8/1.0	0.2/0.0	0.7/1.0	0.7/1.0	0.7/1.0
(if yes) Mean number 5-17	1.3/1.0	1.4/1.0	1.3/1.0	1.1/1.0	1.2/1.0
<u>Regularly Care for Someone (% Yes)</u>					
(if yes) Are you paid (% Yes)	44.6%	78.3%	68.5%	48.8%	48.7%
(if yes) Is it a relative (% Yes)	39.5%	44.2%	15.4%	43.9%	35.5%

Worked Last Week (% Yes)	31.6%	58.1%	68.9%	43.1%	46.6%
(if yes) Mean number of hours	30.3/31.0	28.2/22.0	33.8/36.0	33.7/38.0	29.8/32.0
Worked in Past Year (% Yes)	52.5%	62.0%	77.2%	57.8%	62.7%
(if yes) Mean number of weeks	30.4/30.0	39.1/49.0	41.9/52.0	34.8/40.0	35.0/40.0
Health-Care Related Job in Past Year (% Yes)	23.3%	53.6%	64.3%	27.4%	33.3%
(if no) Health-care job ever (% Yes)	15.2%	26.4%	28.6%	19.0%	20.5%
Previous Training in Health Care (% Yes)	25.7%	24.0%	73.1%	35.8%	42.8%
Other Adults in Home Work FT (% Yes)	34.7%	29.1%	39.1%	43.5%	40.2%
(if yes) Mean number who work full-time	1.3/1.0	1.2/1.0	1.3/1.0	1.3/1.0	1.4/1.0
Other Adults in Home Work PT (% Yes)	9.6%	12.9%	10.7%	11.8%	9.7%
(if yes) Mean number who work part-time	1.2/1.0	1.1/1.0	1.1/1.0	1.2/1.0	1.3/1.0
Own a Car (% Yes)	55.3%	53.1%	82.3%	64.4%	68.1%

**Table 47-E. Demographic Profile of CTI Participants and WIA/WTW Comparison Groups**

	CTI-WIA Participant	CTI-WtW Participant	Non-CTI WIA	Non-CTI WtW
<u>Number</u>	<u>4,122</u>	<u>1,694</u>	<u>8,452</u>	<u>6,354</u>
% Female	86.3%	92.8%	50.0%	75.5%
<u>Ethnicity</u>				
African American	16.0%	24.3%	11.7%	27.7%
Asian/Pacific Islander	16.5%	10.4%	11.3%	6.0%
Hispanic	28.6%	36.0%	34.1%	42.1%
Non-Hispanic White	33.0%	24.4%	39.9%	22.5%
Other	6.0%	5.0%	3.0%	1.7%
<u>Age</u>				
Under 21	19.4%	16.5%	7.8%	9.4%
21 to 30	29.5%	41.5%	23.2%	38.3%
31 to 40	22.1%	26.5%	27.5%	35.2%
41 to 50	18.1%	12.9%	27.0%	15.1%
Over 50	11.0%	2.7%	14.5%	2.0%
Mean/Median	33.1/31.0	30.1/28.0	37.4/38.0	31.7/31.0
<u>Educational Attainment</u>				
Less Than High School	19.2%	35.5%	17.4%	53.6%
High School Grade / GED	51.9%	49.5%	49.5%	40.6%
Post High School Education	22.0%	12.0%	20.1%	5.3%
College Graduate	6.9%	3.0%	13.1%	0.5%
<u>Number of Dependents</u>				
Zero	50.1%	13.2%	57.3%	na

One	20.4%	30.7%	18.4%	na
Two	17.6%	29.4%	14.6%	na
Three or more	11.9%	26.7%	9.7%	na
Mean/Median	1.0/0.0	1.9/2.0	0.8/0.0	na
Pct. Non-Citizen	15.6%	13.8%	13.7%	12.3%
Pct. Limited English Speaker	10.3%	12.8%	9.4%	14.5%

#### **Welfare History of CTI Participants and WIA/WTW Comparison Groups**

	CTI-WIA Participant	CTI-WtW Participant	Non-CTI WIA	Non-CTI WtW
Ever Received Welfare (1987-2001)	41.7%	76.3%	28.7%	91.3%
Ever Received Welfare (2000-2001)	18.0%	60.6%	10.3%	81.2%
Received Welfare at Intake	10.7%	54.1%	5.1%	76.4%
<u>Months on Welfare (1998-2001)</u>				
None	75.7%	33.8%	85.3%	15.5%
1 to 12	8.6%	17.9%	6.9%	14.0%
13 to 24	6.2%	13.9%	3.2%	15.2%
25 to 36	5.1%	14.1%	2.7%	22.3%
37 to 48	4.4%	20.3%	2.0%	33.0%
Mean/Median	5.2/0.0	17.2/12.0	2.7/0.0	25.2/28

#### **Site and Training Profile of CTI Participants and WIA/WTW Comparison Groups**

	CTI-WIA Participant	CTI-WtW Participant	Non-CTI WIA	Non-CTI WtW
<u>Training Site</u>				
Kern	11.4%	6.5%	6.5%	21.8%
Long Beach	11.0%	4.2%	2.9%	8.6%
NORTEC	16.1%	12.4%	7.5%	0.0%
North Bay	4.3%	6.1%	3.3%	3.6%
Riverside	4.8%	10.5%	5.7%	9.8%
SELACO	4.8%	8.3%	5.7%	1.6%
SETA	9.5%	8.3%	7.0%	4.3%
San Diego	5.9%	9.4%	24.8%	20.9%
San Francisco	7.2%	3.1%	2.6%	2.6%
San Jose	5.3%	12.8%	16.3%	6.3%
Ventura	1.7%	1.2%	3.8%	8.7%
West Hills	18.2%	17.3%	13.9%	11.8%
<u>Type of Training</u>				
CNA/HHA	26.5%	43.2%	na	na
IHSS	3.6%	1.8%	na	na
LVN/RN	9.0%	2.5%	na	na
Other	9.6%	9.7%	na	na
Unknown	51.3%	42.9%	na	na
<u>Training Exit Status</u>				
Still Enrolled	30.5%	24.4%	na	na
Entered Employment	36.7%	40.6%	na	na

In Add. Ed/Service	0.4%	0.4%	na	na
Completed Ed/Services	19.9%	18.0%	na	na
Soft Exit	0.1%	0.0%	na	na
Dropout	10.3%	14.3%	na	na
Other	2.2%	2.4%	na	na

**Table 48-E. Demographic Profile of Newly Licensed CNAs by Program Participation**

	CTI-WIA Participant	CTI-WtW Participant	Non-CTI WIA	Non-CTI WtW	Non- WIA/WtW
<u>Number</u>	<u>1,578</u>	<u>776</u>	<u>347</u>	<u>887</u>	<u>43,028</u>
% Female	86.9%	93.8%	87.3%	98.5%	81.5%
% Unknown gender	0.0%	0.0%	0.0%	0.0%	4.4%
<u>Ethnicity</u>					
African American	14.3%	25.4%	20.8%	45.2%	na
Asian/Pacific Islander	16.5%	12.6%	15.6%	2.4%	na
Hispanic	31.9%	39.1%	40.6%	40.8%	na
Non-Hispanic White	31.6%	19.2%	21.6%	10.8%	na
Other	4.4%	2.5%	1.2%	0.2%	na
<u>Age</u>					
Under 21	24.7%	19.2%	12.1%	9.4%	25.0%
21 to 30	31.9%	42.7%	34.0%	49.2%	30.9%
31 to 40	21.1%	24.9%	23.9%	29.0%	23.6%
41 to 50	14.1%	11.2%	21.9%	11.3%	14.9%
Over 50	8.2%	2.1%	8.1%	1.2%	5.7%
Mean/Median	30.8/28.0	29.1/27.0	33.5/32.0	29.8/28.0	30.4/28.0
<u>Educational Attainment</u>					
Less Than High School	20.3%	37.2%	25.7%	57.8%	na
High School Grade / GED	57.3%	53.0%	54.2%	39.4%	na
Post High School Education	17.5%	8.0%	15.3%	2.7%	na
College Graduate	4.9%	1.8%	4.9%	0.1%	na
<u>Number of Dependents</u>					
Zero	47.0%	12.4%	35.5%	na	na
One	20.1%	30.3%	26.8%	na	na
Two	19.7%	31.1%	21.6%	na	na
Three or more	13.3%	26.3%	16.1%	na	na
Mean/Median	1.1/1.0	1.9/2.0	1.3/1.0	na	na
Pct. Non-Citizen	17.0%	13.8%	22.2%	10.7%	na
Pct. Limited English Speaker	7.5%	11.3%	12.1%	9.1%	na

**Welfare History and Training Sites of CTI Participants and WIA/WTW Comparison Groups**

	CTI-WIA Participant	CTI-WtW Participant	Non-CTI WIA	Non-CTI WtW	Non- WIA/WtW
Ever Received Welfare (1987-2001)	45.6%	78.5%	50.7%	98.5%	34.2%
Ever Received Welfare (2000-2001)	21.6%	63.4%	28.2%	97.2%	17.7%
Received Welfare at Intake	14.0%	57.9%	18.7%	96.8%	45.1%
<u>Months on Welfare (1998-2001)</u>					
None	71.1%	31.2%	65.1%	2.6%	77.9%
1 to 12	10.7%	19.2%	12.1%	12.1%	7.2%
13 to 24	6.8%	13.3%	8.4%	14.5%	5.2%
25 to 36	5.8%	14.6%	7.8%	23.7%	4.9%
37 to 48	5.6%	21.8%	6.6%	47.1%	4.8%
Mean/Median	6.2/0.0	17.8/12.0	7.6/0.0	31.7/36.0	5.1/0.0
<u>Training Site</u>					
Kern	18.0%	10.4%	6.6%	1.0%	na
Long Beach	4.3%	3.1%	0.0%	1.4%	na
NORTEC	13.0%	8.0%	2.9%	0.0%	na
North Bay	4.2%	4.5%	7.5%	0.2%	na
Riverside	4.2%	12.5%	11.0%	8.2%	na
SELACO	9.5%	15.0%	0.3%	2.5%	na
SETA	12.6%	7.5%	0.6%	0.1%	na
San Diego	9.8%	11.6%	3.5%	2.9%	na
San Francisco	5.0%	3.0%	3.8%	0.0%	na
San Jose	4.1%	11.6%	2.0%	0.2%	na
Ventura	1.5%	0.6%	0.3%	0.7%	na
West Hills	13.8%	12.2%	2.9%	0.5%	na
Other	0.0%	0.0%	58.8%	82.3%	na

**Table 49-E. Employment History for CTI Participants by Training Type, 1999 through 2000**

	CNA/HHA Training	IHSS Training	LVN/RN Training	Other Training	Unknown Training
<u>Number</u>	<u>1,824</u>	<u>180</u>	<u>412</u>	<u>560</u>	<u>2,840</u>
Percent Ever Employed	77.9%	76.1%	82.3%	80.2%	77.8%
<u># of Quarters Employed</u>					



1 to 2	20.9%	11.0%	7.1%	15.6%	16.1%
3 to 6	40.9%	33.6%	29.8%	31.9%	34.6%
7 to 8	38.2%	55.5%	63.1%	52.6%	49.3%
Mean	5.1	6.1	6.4	5.8	5.6
Median	5.0	7.0	8.0	7.0	6.0

# of Employers

One	9.6%	4.4%	3.5%	7.1%	7.1%
Two	8.8%	3.7%	3.0%	5.8%	7.2%
Three	7.5%	6.6%	5.6%	6.7%	6.6%
Four or more	74.0%	85.4%	87.9%	80.4%	79.1%
Mean	6.6	8.1	8.8	7.5	7.3
Median	6.0	8.0	8.0	8.0	8.0

# of Quarters with Same Employer

1 to 2	36.0%	17.5%	13.6%	26.3%	27.4%
3 to 6	46.2%	38.0%	46.3%	47.7%	44.5%
7 to 8	17.8%	44.5%	40.1%	26.1%	28.1%
Mean	3.9	5.4	5.3	4.5	4.5
Median	3.0	6.0	5.0	4.0	4.0

Mean Annual Earnings (in 2003 \$)

1999	\$7,381	\$10,841	\$14,443	\$10,814	\$10,653
2000	\$8,656	\$10,052	\$16,367	\$13,113	\$12,091

Median Annual Earnings (in 2003 \$)

1999	\$3,710	\$7,493	\$13,137	\$6,858	\$6,610
2000	\$5,778	\$7,432	\$15,328	\$9,403	\$7,942

# of Quarters Employed in Health Services

Zero	76.7%	81.8%	31.0%	69.5%	67.3%
1 to 2	10.7%	4.4%	8.9%	9.6%	10.7%
3 to 6	7.6%	6.6%	22.1%	10.7%	10.1%
7 to 8	5.0%	7.3%	38.1%	10.2%	11.9%
Mean	0.9	1.0	4.1	1.4	1.5
Median	0.0	0.0	4.0	0.0	0.0

# of Qtrs with Same Health Services

Employer

1 to 2	53.8%	24.0%	17.1%	35.8%	36.4%
3 to 6	29.6%	36.0%	38.9%	41.6%	33.8%
7 to 8	16.6%	40.0%	44.0%	22.6%	29.8%
Mean	3.3	5.3	5.4	3.9	4.3
Median	2.0	6.0	6.0	3.0	4.0

**Table 50-E. Employment History for Newly Certified CNAs by Program Participation, 1999 through 2000**

	CTI-WIA Participant	CTI-WtW Participant	Non-CTI WIA	Non-CTI WtW	Non- WIA/WtW
<u>Number</u>	<u>1,578</u>	<u>776</u>	<u>347</u>	<u>887</u>	<u>41,093</u>
<u>Percent Ever Employed</u>	76.6%	78.6%	81.0%	76.7%	70.3%
<u># of Quarters Employed</u>					
1 to 2	18.6%	21.3%	19.9%	30.4%	21.2%
3 to 6	36.6%	43.0%	34.2%	45.9%	36.1%
7 to 8	44.8%	35.7%	45.9%	23.7%	42.7%
Mean	5.4	5.0	5.4	4.3	5.3
Median	6.0	5.0	6.0	4.0	6.0
<u># of Employers</u>					
One	8.8%	9.7%	10.7%	13.8%	9.7%
Two	7.7%	9.5%	8.5%	12.7%	8.9%
Three	6.2%	9.0%	6.4%	13.1%	7.7%
Four or more	77.3%	71.8%	74.4%	60.4%	73.7%
Mean	7.0	6.2	6.8	5.3	7.7
Median	7.0	6.0	7.0	5.0	7.0
<u># of Quarters with Same Employer</u>					
1 to 2	29.5%	37.2%	32.4%	49.4%	32.4%
3 to 6	46.0%	47.5%	38.1%	40.6%	44.3%
7 to 8	24.5%	15.3%	29.5%	10.0%	23.3%
Mean	4.3	3.7	4.4	3.1	4.2
Median	4.0	3.0	4.0	3.0	4.0
<u>Mean Annual Earnings (in 2003 \$)</u>					
1999	\$9,701	\$6,893	\$11,246	\$4,666	\$10,102
2000	\$10,758	\$8,176	\$12,148	\$4,684	\$12,466
<u>Median Annual Earnings (in 2003 \$)</u>					
1999	\$5,338	\$3,088	\$5,816	\$2,179	\$4,881
2000	\$7,319	\$4,917	\$7,701	\$2,741	\$7,605
<u># of Quarters Employed in Health Services</u>					
Zero	76.3%	78.7%	81.1%	73.2%	63.7%
1 to 2	10.2%	11.0%	6.4%	15.2%	16.2%
3 to 6	7.2%	6.1%	8.5%	9.0%	11.9%
7 to 8	6.3%	4.3%	3.9%	2.7%	8.2%
Mean	0.9	0.7	0.7	0.8	1.4

Median	0.0	0.0	0.0	0.0	0.0
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# of Qtrs with Same Health Services

Employer

1 to 2	49.3%	56.2%	43.4%	66.5%	49.6%
3 to 6	28.0%	32.3%	37.7%	28.0%	32.7%
7 to 8	22.7%	11.5%	18.9%	5.5%	17.8%
Mean	3.7	3.0	3.4	2.4	3.4
Median	3.0	2.0	3.0	2.0	3.0

**Table 51-E. Estimated Difference in Employment Rate between CTI Participants and Comparison Groups, Controlling for Demographic Variation**

	Total Participant	WIA Participant	WtW Participant
Number of Total Observations	5,780	2,903	2,877
CTI Observations	2,554	1,775	779
Employed During ...			
Exit Quarter	2.0%	-7.8% ***	10.9% ***
Post Quarter 1	5.0% **	-6.6% **	14.7% ***
Post Quarter 2	5.9% ***	-2.3%	13.7% ***
Employed in Health Services During ...			
Exit Quarter	34.5% ***	35.7% ***	33.3% ***
Post Quarter 1	37.7% ***	41.4% ***	31.8% ***
Post Quarter 2	33.9% ***	39.1% ***	28.5% ***
Percent Difference in Earnings During ...			
Exit Quarter	32.8% **	-27.8% *	133.6% ***
Post Quarter 1	51.6% ***	-38.3% ***	239.3% ***
Post Quarter 2	60.7% ***	-18.0%	210.2% ***

\* p-value < .05, \*\* p-value < .01, \*\*\* p-value < .001

## APPENDIX F. RESEARCH METHODS

### *Sources of all data*

Listed in Table 52-F below is a summary of the surveys and questionnaires administered as part of the process and implementation evaluation, plus the administrative data used to determine the project's outcomes.

**Table 52-F. Summary of Surveys and Questionnaires Used in CTI Evaluation**

Name of instrument	Mode of administration	Duration	How many completed?	Who administered?
Staff and Participant In-Depth Interviews (S) and (P)	Face-to-face interviews at four of the sites, supplemented by telephone interviews	30-45 minutes	55 total: 22 students (or graduates)+ 33 staff	UCLA/UCSF administered; contact information from the focus sites
Baseline Information Form (P)	Questionnaire; used in conjunction with WIA data intake form	5-10 minutes	4,791 forms received by UCLA	All 12 sites; program intake staff personnel
Training Satisfaction Form-I (P) (TS-I)	Questionnaire administered by site personnel and sent to UCLA	10-15 minutes	820 completed (during the training program)	Training program administrators at the four focus sites.
Training Satisfaction Form-II (P) (TS-II)	Telephone interview conducted by UCLA	10-15 minutes	158 completed (about 6 months after the training program)	UCLA administered with info (names, phone #s) from TS-I
Early Departure Survey (P)	Telephone interview conducted by UCLA	10-15 minutes	99 total	UCLA administered by telephone; all sites included
Post-program survey of CTI coordinators	Questionnaires provided at site meeting and in follow-up emails.	10-45 minutes	7 of the 12 sites responded	UCLA administered
Employer Survey	Face-to-face and telephone interviews	One hour	20 total	Administered by UCLA and UCSF; focus sites only.
<b>California statewide administrative data:</b>				
Database	Source	Dates	Groups	Measures

WIA data	EDD	2002 / 2003	CTI participants + comparison group	Demographics --age, gender, education, site
WtW data	EDD	2002 / 2003	comparison group	Demographics --age, gender, education, site
CNA Registry Files	Department of Health Services	1995 - 2003	All newly certified CNAs in CA	Date of certification, county, age, gender
CNA Survey	Department of Health Services	2000	30,000 CNAs in California	Current CNA status, gender, age, education, where trained, employment location
Base Wage/ UI Covered Employment and Wages (ES-202)	EDD	1998-2002 (quarterly)	CTI participants; comparison groups	Earnings, quarters worked, industry
In-Home Supportive Services data	Department of Health Services	1999-2002	CTI participants	Wages, hours, relationship to client, county

S=CTI Staff; P= CTI Participants

#### Sources of data on CTI participants

Table 53-F shows the source of data, by site, for the CTI participants. As part of the evaluation, we used data from the statewide WIA database, supplemented with data from site-collected Baseline Information Forms, described above. The evaluation team asked each site to complete a Baseline Information Form for each enrolled participant. Most sites used paper-and-pencil forms, but a couple of sites used an electronic Microsoft Access version.

There are, in some cases, large discrepancies between the number of CTI participants reported in the WIA database and the number of Baseline Information Forms (comparing columns A and B). Not all sites fully completed Baseline forms, and this is most apparent for NoRTEC, where only about one in three of its 875 WIA enrollees completed Baseline forms, and Long Beach, where only one in two, completed Baseline Information Forms. For these sites in particular, the Baseline findings may be biased.

Some explanations (A>B) are: completing training at some satellite sites before receiving and/or administering the baselines; staff turnover, resulting in lapses in administrative oversight; unclear understanding of the importance of the evaluation and a lack of commitment to and time for evaluation efforts. The evaluation team was aware that a few sites felt overwhelmed by the extra work imposed by the evaluation, and did not perceive positive or negative ramifications of not cooperating fully. Where there were too many baselines (B>A), probably some participants were never officially “enrolled” in the WIA, and these would actually be considered as dropouts.

Column C shows the numbers of “matches” by site for those whose social security numbers were found in both the WIA dataset and the Baseline dataset. Thus, for 4,247

participants, we have complete demographic information. For the analyses in this report, we identify CTI participants on the basis of the WIA database information.

**Table 53-F. Source of CTI Participant Data, by Collaborative**

Training Site	A. Number of Baseline Forms received	B. Number of CTI trainees in WIA dataset	C. Number who are in both A and B.	D. Number of participants identified with a training program	E. Number who are in A, B, and D.	F. Number of dropouts (from WIA data)
Kern	554	579	503	664	516	39
Long Beach	232	524	219	528	226	6*
NoRTEC	270	875	243	300	65	109
North Bay	255	279	208	209	167	11*
Riverside	387	376	370	414	371	26
Sacramento	473	530	387	481	313	119
San Diego	309	403	269	332	237	48
San Francisco	381	349	299	312	197	14
San Jose	401	435	320	305	190	68
SELACO	280	337	265	346	250	0
Ventura	82	88	77	33	28	10
West Hills	1166	1041	973	719	501	215
Unknown	1	114	114	1	0	--
<b>TOTAL</b>	<b>4791</b>	<b>5930</b>	<b>4247</b>	<b>4644</b>	<b>3061</b>	<b>500</b>

\* Note: 33 Early Departure names were obtained from Long Beach, and 28 from North Bay indicating that these numbers probably are not up-to-date.

A separate dataset (column D) contains the numbers of those for whom we have information on types of training received. We asked sites for this information so we could distinguish between, for example, those getting minimal training, and those getting more extensive training.

### Analytical tools

For this report, we use several methods to analyze CTI participants.

Descriptive Analyses. The purpose of descriptive analyses is to profile CTI participants. These analyses are straightforward, involving simple descriptive statistics (means, standard deviations, and medians) and cross-tabular data descriptions. For example, we use Chi-square tests to compare proportions of those in the program, and of those completing the program, by whether or not they previously provided home care to relatives.

Comparing means--t-tests and ANOVA. We use t-tests to determine if there are differences between two groups (say the CTI-WtW group and the non-CTI WtW group), for mean incomes or for mean numbers of months worked. We use T-tests, for example, to compare earnings between those previously providing home care and those not, or to compare wages and

wage increases between CTI participants and non-participants. We use analysis of variance (ANOVA) to determine if there are significant differences among more than two groups, for example, if we are comparing quarterly earnings among three or more groups.

The alpha level for all analyses is .05. In other words, if the difference between two groups is found using an alpha of .05, this indicates that there is a 5% probability that the difference found between the variables is a "fluke" rather than an actual difference.

Multivariate Regression Analysis. The purpose of multivariate regression analysis is to estimate the impact of the CTI program by comparing program outcomes (such as employment and earnings) between CTI groups and the comparison groups while statistically controlling for differences in observable characteristics (such as education and employment history).

When the dependent (outcome) variable is categorical, for example employed or not employed, we use a logistic regression model.<sup>11</sup> From the logistic regression results we calculate the marginal effect, or rate of change, of a given independent variable based on the following translation:  $B(P)(1-P)$ . Where  $B$  is the coefficient estimate for a given independent variable based on the logistic regression model results and  $P$  is the overall group mean of the dichotomous independent variable (Gujarati, 1995). The Wald Chi-Square statistic is used to determine statistical significance, based on a .05 alpha level cut-off.

When the dependent (outcome) variable is continuous, such as earnings, we use a log-linear regression model.<sup>12</sup> From the log-linear regression results we calculate the marginal effect of a given independent variable based on the following translation:  $e^B$ . Where  $B$  is the coefficient estimate for a given independent variable based on the log-linear regression model results and  $e$  is the natural log base. A t-test is used to determine statistical significance, based on a .05 alpha level cut-off.

### Comparison groups

To get a relative benchmark for determining the impact of the CTI program on CTI participants we compare the CTI groups to several comparison groups. We must stress that these comparisons are not as stringent as they would be if there were actual control groups (where participants would be randomly assigned to the treatment group, or CTI program, or a control group, or not CTI program), and preclude us from making any definitive conclusions about the program's impact. The use of comparison group findings, however, is the next best approach.

1. The most important comparisons will be between the CTI participant groups and non-participant groups. These will be conducted for subsets of the Workforce Investment Act (WIA)

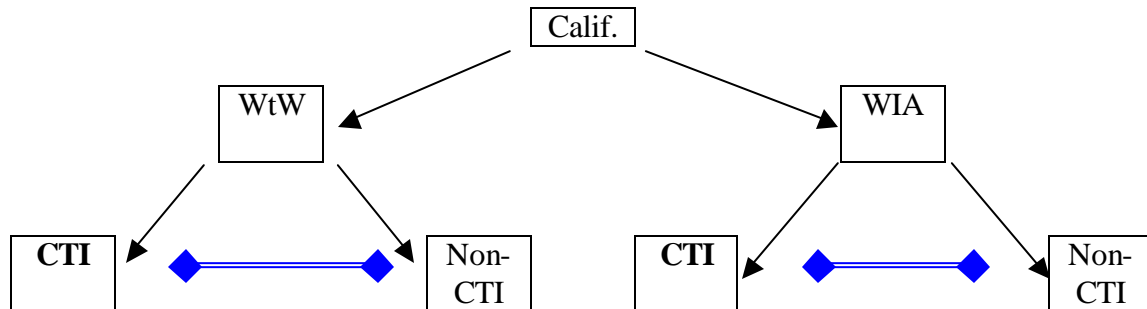
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<sup>11</sup> Numerous studies rate logistic regression as the superior method when the dependent variable is categorical (Halpern, Blackwelder, & Verter, 1971; Hosmer, Hosmer, & Fisher, 1983).

<sup>12</sup> Log-linear models exhibit similar properties as an Ordinary Least Squares (OLS) model because the models are linear in the parameters. However, certain variables such as earnings may not be linear, but can be made linear through a transformation (for example, taking the natural log of earnings) (Gujarati, 1995).

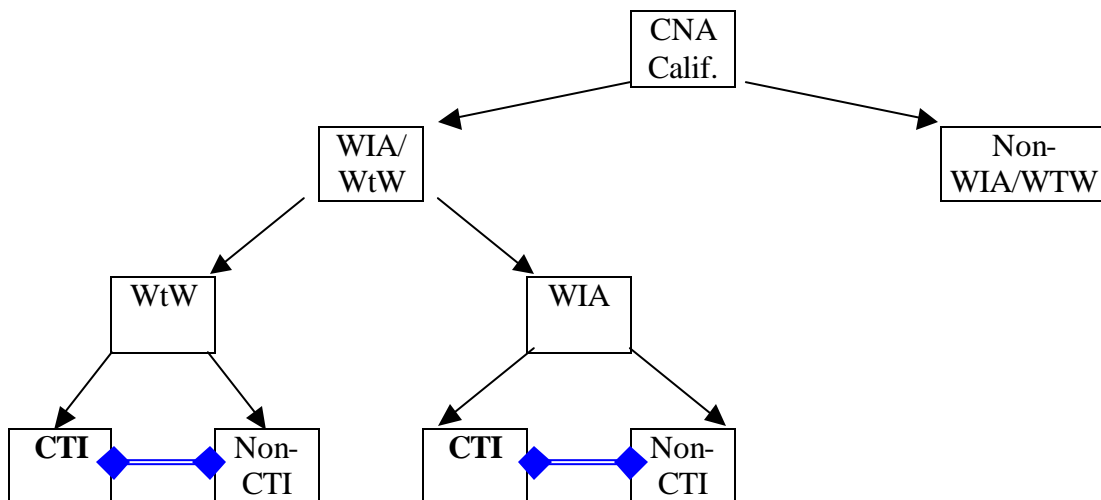
training population and the Welfare-to-Work (WtW) training population, as depicted in Figure 1-E below.

**Figure 1-E. Overall Population Groups for CTI Evaluation**



2. We also have data available on the universe of Certified Nurse Assistants (CNAs) certified in California, which we use to establish a comparison group for the CNAs trained in the CTI program, as depicted in Figure 2-E below. Again, we compare within the subsets of WIA and WtW populations. We also compare CTI trained CNAs with CNAs who did not receive training through WIA or WtW (Non-WIA/WtW).

**Figure 2-E. CNA Population Groups for CTI Evaluation**



3. Other comparison groups are those who were identified as dropouts in the WIA data files (N=665), and those who remained in the program.



*Description of Variables Used in Multivariate Analyses*

The table below is a description of variables used as outcome (dependent) or predictor variables for regression analyses in this report.

**Table 54-F. Definitions of Outcome and Predictor Variables used in Multivariate Analyses**

Outcome Variable	Source	Description
Employment Exit Quarter	Base Wage	Employed during quarter of program exit (1=yes, 0=no).
Employment Post Quarter 1	Base Wage	Employed during first quarter after program exit (1=yes, 0=no).
Employment Post Quarter 2	Base Wage	Employed during second quarter after program exit (1=yes, 0=no).
Employment in Health Services Exit Quarter	Base Wage	Employed in Health Services Industry during quarter of program exit (1=yes, 0=no).
Employment in Health Services Post Quarter 1	Base Wage	Employed in Health Services Industry during first quarter after program exit (1=yes, 0=no).
Employment in Health Services Post Quarter 2	Base Wage	Employed in Health Services Industry during second quarter after program exit (1=yes, 0=no).
Earnings Exit Quarter	Base Wage	Total earnings during quarter of program exit.
Earnings Post Quarter 1	Base Wage	Total earnings during first quarter after program exit.
Earnings Post Quarter 2	Base Wage	Total earnings during second quarter after program exit.
Predictor Variable	Source	Description
CTI Participant	WIA	CTI program participant (1=yes, 0=no).
Program Dropout	WIA	Dropped out of training program before completion (1=yes, 0=no).
CNA Training Group	Baseline 2	Participants receiving CNA or HHA training compared with all others (1=yes, 0=no).
IHSS Training Group	Baseline 2	Participants receiving IHSS training compared with all others (1=yes, 0=no).
Heard about CTI from Established Channels	Baseline	Participants who heard about the CTI program from county worker, employer, career center, school, or union (1=yes, 0=no).
Heard about CTI from "Someone Else"	Baseline	Participants who heard about the CTI program from "someone else" (1=yes, 0=no).
Welfare-to-Work Participant	WIA	Participants in Training Program funded by state Welfare-to-Work identified with a 798 grant number (1=yes, 0=no).

Age of Participant (as of Jan. 1, 2001)	WIA	Person's age as of January 1, 2001.
Age of Participant, Squared	WIA	Person's age, squared.
Male	WIA	Gender variable (1=male, 0=female).
Asian/Pacific Islander	WIA	Asian/Pacific Islander compared with NH-White --dummy variable (1=yes, 0=no).
African American	WIA	African American compared with NH-White --dummy variable (1=yes, 0=no).
Hispanic	WIA	Hispanic compared with NH-White --dummy variable (1=yes, 0=no).
Other Race/Ethnicity (excluding NH Whites)	WIA	Other race/ethnicity compared with NH-White --dummy variable (1=yes, 0=no).
High School Graduate	WIA	High school graduate compared with less than high school (1=yes, 0=no).
Non-Citizen	WIA	Non-citizen dummy variable (1=yes, 0=no).
Limited English Proficiency	WIA	Limited English Proficiency dummy variable (1=yes, 0=no).
Never Married	Baseline	Never married compared with married, divorced, separated, widowed (1=yes, 0=no).
Regularly Care for Someone Else	Baseline	Regularly help take care of someone who is sick, disabled, or elderly (1=yes, 0=no).
Own a Car	Baseline	Own a car (1=yes, 0=no).
Number of Months on Welfare, 1998-2001	MEDS	Number of months receiving CalWORKs from 1998 to 2001.
Number of Quarters Employed, 1999-2000	Base Wage	Number of quarters employed from 1999 to 2000.
# of Qtrs Employed in Health Services, 1999-2000	Base Wage	Number of quarters employed in a health services industry from 1999 to 2000.
# of Qtrs Employed outside Health Services, 1999-2000	Base Wage	Number of quarters employed in an industry other than health services from 1999 to 2000.
Employment in Health Services Prior Quarter 4	Base Wage	Employed in Health Services Industry during fourth quarter before program exit (1=yes, 0=no).
Earnings Prior Quarter 4	Base Wage	Total earnings during fourth quarter before program exit.
Regional Unemployment Rate	LMID	Unemployment rate for primary county of training site during quarter of program exit.

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#### Results of Regressions, using data for CTI participants only

The results of this first regression (Table 55-F) describe, for the CTI participants, which variables predict whether or not a participant will be employed during the second quarter after the WIA exit. The strongest predictors are being a program dropout, prior employment, being a

citizen and caring for someone else. Someone who dropped out of the program is about 24% less likely than a non-dropout to be working at six months. If participants worked during 1999 and 2000, they are 3% more likely to be employed for each quarter worked. If they are a non-citizen, they are 13% more likely to be employed, and if they regularly cared for someone prior to the program they are 7% more likely to be employed.

**Table 55-F. Logistic Regression Model Predicting Employment during the Second Quarter After Program Exit**

Independent Variable	Coefficient Estimate	Standard Error	Percent Change	p-value
Intercept	-0.2778	(0.6212)		
Program Dropout	-1.1617	(0.1619)	-23.60% ***	
Welfare-to-Work Participant	0.0647	(0.1446)	1.31%	
CNA Training Group	0.1257	(0.1570)	2.55%	
IHSS Training Group	-0.2921	(0.3317)	-5.93%	
Heard about CTI from Established Channels	-0.0157	(0.1747)	-0.32%	
Heard about CTI from "Someone Else"	0.1048	(0.1501)	2.13%	
Age of Participant (as of Jan. 1, 2001)	0.0350	(0.0320)	0.71%	
Age of Participant, Squared	-0.0006	(0.0004)	-0.01%	
Male	0.1837	(0.2080)	3.73%	
Asian/Pacific Islander	0.0614	(0.2436)	1.25%	
African American	-0.1748	(0.1912)	-3.55%	
Hispanic	0.0935	(0.1701)	1.90%	
Other Race/Ethnicity (excluding NH Whites)	-0.2556	(0.2846)	-5.19%	
High School Graduate	0.2806	(0.1457)	5.70%	
Never Married	0.0933	(0.1453)	1.90%	
Regularly Care for Someone Else	0.3696	(0.1527)	7.51% *	

Non-Citizen	0.6455	(0.2251)	13.11% **
Limited English Proficiency	0.2871	(0.2464)	5.83%
Own a Car	0.1612	(0.1355)	3.27%
Number of Months on Welfare, 1998-2001	0.0009	(0.0048)	0.02%
Number of Quarters Employed, 1999-2000	0.1442	(0.0213)	2.93% ***
Regional Unemployment Rate	-1.9965	(1.7011)	-40.55%

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\*p<.05, \*\*p<.01, \*\*\*p<.001

N=1,485

Table 56-F is a summary of which variables predict placement in health services at during the second quarter after program exit. Again, not being a program dropout, being in the CNA training program, being a non-citizen, and prior work in health care are significant predictors. To a lesser degree, age and the regional unemployment rate also play a role. Program dropouts are 43% less likely than non-dropouts to be working in health care. CNA trainees, compared with the other training program trainees, are 18% more likely to be working in health care. And, non-citizens, compared with citizens, are 17% more likely to be health care workers.

**Table 56-F. Logistic Regression Model Predicting Employment in Health Services Industry during the Second Quarter After Program Exit**

Independent Variable	Coefficient Estimate	Standard Error	Percent Change	p-value
Intercept	-2.1069	(0.6066)		
Program Dropout	-1.7263	(0.2049)	-42.73% ***	
Welfare-to-Work Participant	0.1402	(0.1375)	3.47%	
CNA Training Group	0.7251	(0.1470)	17.95% ***	
IHSS Training Group	-0.5814	(0.3388)	-14.39%	
Heard about CTI from Established Channels	0.0695	(0.1623)	1.72%	
Heard about CTI from "Someone Else"	0.1789	(0.1403)	4.43%	
Age of Participant (as of Jan. 1, 2001)	0.0754	(0.0319)	1.87% *	
Age of Participant, Squared	-0.0010	(0.0004)	-0.03% *	
Male	0.0261	(0.1832)	0.65%	
Asian/Pacific Islander	-0.0779	(0.2193)	-1.93%	
African American	-0.0295	(0.1805)	-0.73%	
Hispanic	0.1927	(0.1588)	4.77%	
Other Race/Ethnicity (excluding NH Whites)	0.3516	(0.2806)	8.70%	
High School Graduate	0.2099	(0.1427)	5.20%	
Never Married	0.1446	(0.1344)	3.58%	
Regularly Care for Someone Else	-0.1360	(0.1357)	-3.37%	
Non-Citizen	0.6710	(0.1917)	16.61% ***	
Limited English Proficiency	-0.2541	(0.2224)	-6.29%	
Own a Car	0.1700	(0.1273)	4.21%	

Number of Months on Welfare, 1998-2001	0.0008	(0.0046)	0.02%
Number of Quarters Employed, 1999-2000	0.0122	(0.0203)	0.30%
Employed in Health Services 4 Quarters before Exit	1.2435	(0.1874)	30.78% ***
Regional Unemployment Rate	-3.3964	(1.5580)	-84.08% *

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\*p<.05, \*\*p<.01, \*\*\*p<.001

N=1,485

Predictions of earnings follow similar patterns as predictors of employment (Table 57-F). Program dropouts, when controlling for all the other variables, earn 43% less than those remaining in the program, and IHSS trainees, compared with other trainees, earn 45% less. Earnings prior to the program also predict post-program earnings, with a 0.9% increase for each hundred dollars of quarterly earnings four quarters before program exit. Age and regularly caring for someone prior to the program are also significant predictors.

**Table 57-F. OLS Regression Model Predicting Earnings during the Second Quarter After Program Exit**

Independent Variable	Coefficient Estimate	Standard Error	Percent Change	p-value
Intercept	7.0141	(0.3161)		
Program Dropout	-0.5643	(0.1007)	-43.1% ***	
Welfare-to-Work Participant	-0.1009	(0.0708)	-9.6%	
CNA Training Group	-0.0543	(0.0764)	-5.3%	
IHSS Training Group	-0.5928	(0.1641)	-44.7% ***	
Heard about CTI from Established Channels	-0.0341	(0.0868)	-3.4%	
Heard about CTI from "Someone Else"	0.0254	(0.0718)	2.6%	
Age of Participant (as of Jan. 1, 2001)	0.0525	(0.0166)	5.4% **	
Age of Participant, Squared	-0.0007	(0.0002)	-0.1% **	
Male	0.0950	(0.0933)	10.0%	
Asian/Pacific Islander	0.1699	(0.1103)	18.5%	
African American	0.1409	(0.0958)	15.1%	
Hispanic	0.0836	(0.0830)	8.7%	
Other Race/Ethnicity (excluding NH Whites)	0.1283	(0.1538)	13.7%	
High School Graduate	0.0057	(0.0753)	0.6%	
Never Married	-0.0457	(0.0697)	-4.5%	
Regularly Care for Someone Else	-0.1548	(0.0677)	-14.3% *	
Non-Citizen	0.1698	(0.0912)	18.5%	
Limited English Proficiency	0.1265	(0.1086)	13.5%	
Own a Car	0.0179	(0.0659)	1.8%	

Number of Months on Welfare, 1998-2001	-0.0021	(0.0024)	-0.2%
Earnings 4 Quarters before Exit (in hundreds)	0.0086	(0.0011)	0.9% ***
Regional Unemployment Rate	-0.1527	(0.8214)	-14.2%

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\*p<.05, \*\*p<.01, \*\*\*p<.001  
N=1,485



